Excel Reference

MICROSOFT
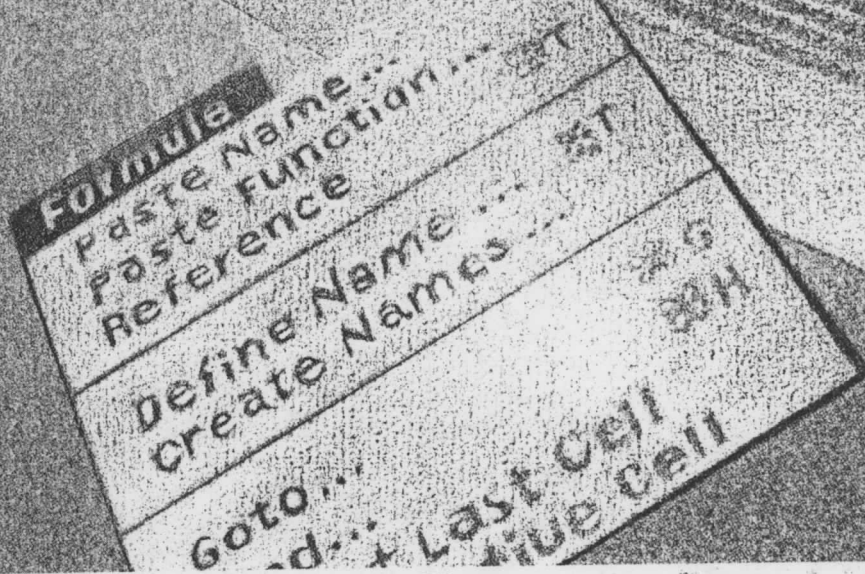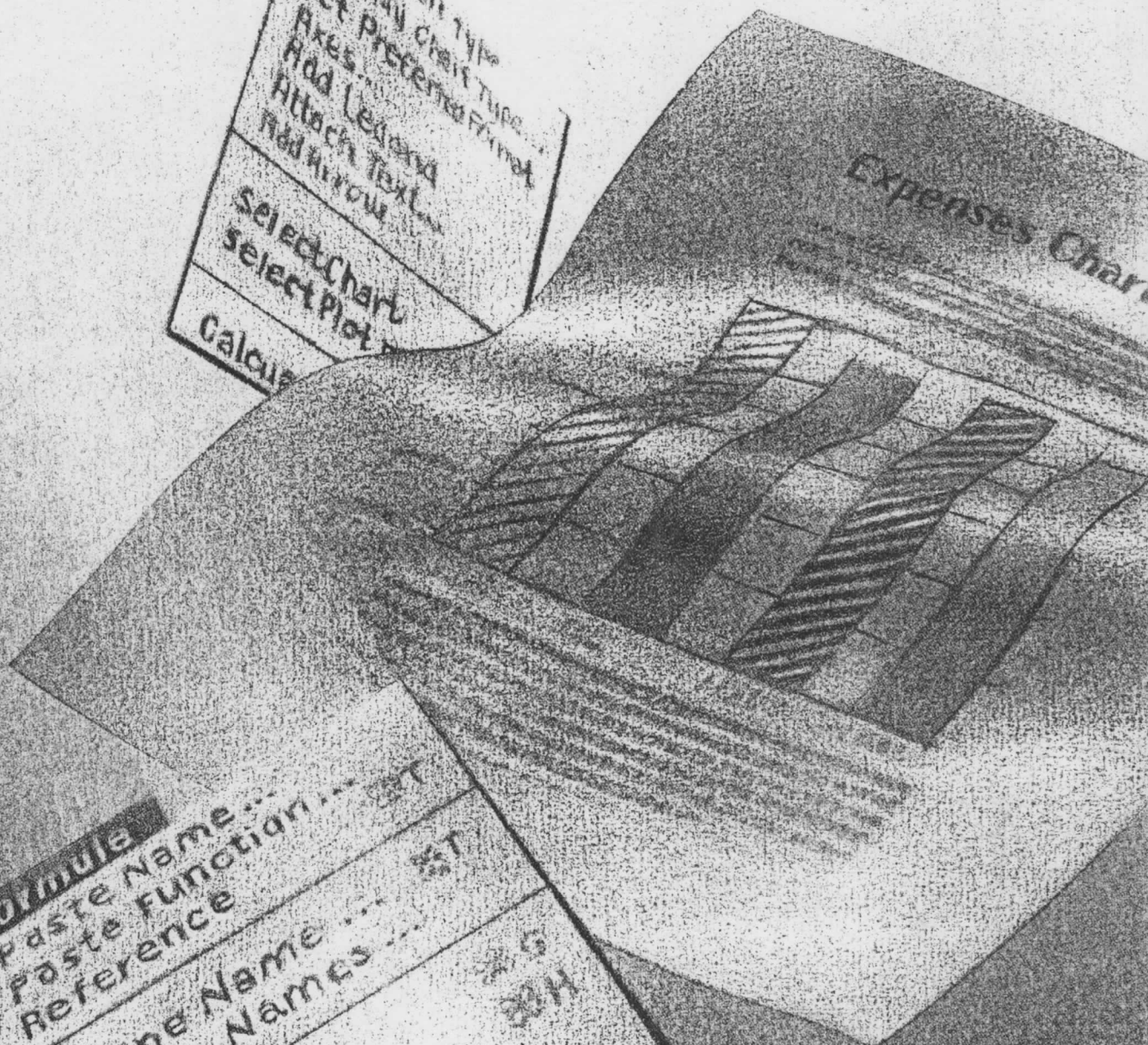
Microsoft Excel

Excel Reference

Excel Reference includes the following information:

- Worksheet commands
- Chart commands
- Appendixes
- A glossary of terms
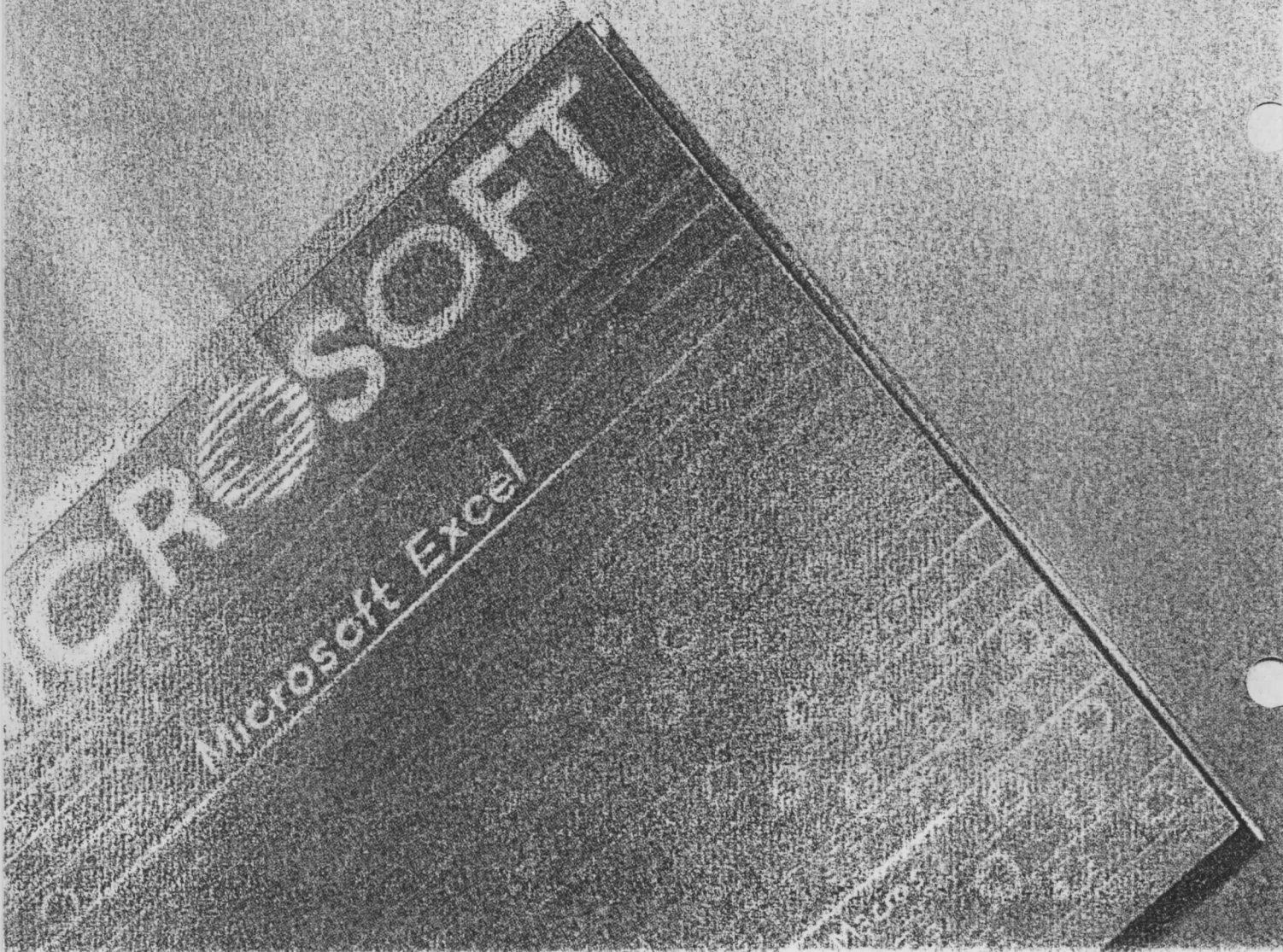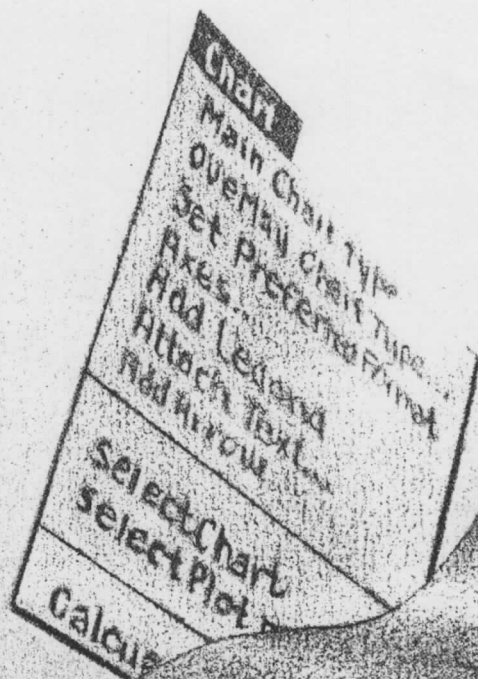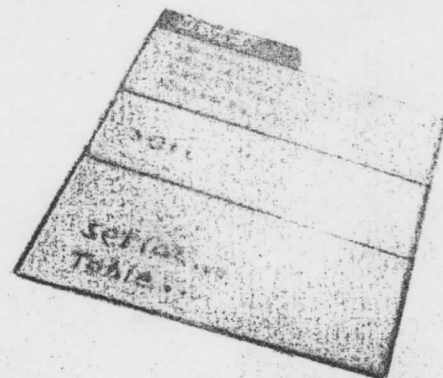
9 Worksheet Commands

This chapter describes Excel's worksheet commands. A command is an instruction to Macintosh to perform an action. Most of the commands work the same way in worksheets and macro sheets. Any differences are noted in the command descriptions.

The commands are arranged in the order in which they appear on the menus. For an alphabetical list of commands, look in the Index under "Command."

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⌘ (Apple menu)
- About Excel...

- Scrapbook
- Alarm Clock
- Note Pad
- Calculator
- Key Caps
- Control Panel
- Puzzle

File
- New...   ⌘N
- Open...   ⌘O
- Open Links...
- Close All
- Save   ⌘S
- Save As...
- Delete...

- Page Setup...
- Print...   ⌘P
- Printer Setup...

- Quit   ⌘Q

Edit
- Undo   ⌘Z
- Cut   ⌘X
- Copy   ⌘C
- Paste   ⌘U
- Clear...   ⌘B
- Paste Special...

- Delete...   ⌘K
- Insert...   ⌘I

- Fill Right   ⌘R
- Fill Down   ⌘D

Formula
- Paste Name...
- Paste Function...
- Reference   ⌘T

- Define Name...   ⌘L
- Create Names...

- Goto...   ⌘G
- Find...   ⌘H
- Select Last Cell
- Show Active Cell

Format
- Number...
- Alignment...
- Style...
- Border...
- Cell Protection...

- Column Width...

Data
- Find   ⌘F
- Extract...   ⌘E
- Delete
- Set Database
- Set Criteria

- Sort...

- Series...
- Table...

Options
- Set Print Area
- Set Print Titles
- Set Page Break
- Remove Page Break

- Font...
- Display...

- Protect Document...

- Precision As Displayed
- R1C1
- Calculate Now   ⌘=
- Calculation...

Macro
- Run...
- Start Recorder
- Absolute Record
- Set Recorder

Window
- Show Clipboard
- New Window

- Budget
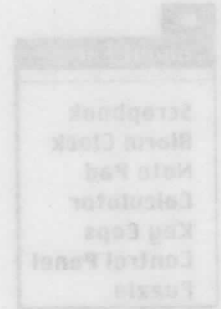- Expenses:1
- Expenses:2
- Mychart

Worksheet Menus

Excel has nine worksheet command menus: Apple, File, Edit, Formula, Format, Data, Options, Macro, and Window.
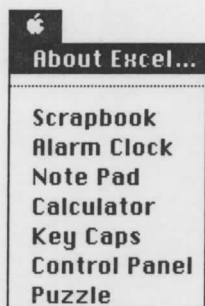
- The Apple menu is similar to others in Macintosh applications. The About Excel command shows how much memory is used by the active document, and provides information about Excel.

- The File menu commands are used to get and save a document, create a new document, print a document, delete a document, and end an Excel session.

- The Edit menu includes some familiar Macintosh editing commands, as well as some editing commands that are specific to Excel. With the editing commands, you can edit a worksheet or the contents of a cell.

- The Formula menu commands simplify creating complex formulas, and naming cells. This menu also has commands for moving to certain cells, whether you are creating a formula or not.

- The Format menu commands allow you to change how numbers, text, and formulas are displayed in cells.

- The Data menu commands control setting up and using a database, sorting information, and creating tables and series.

- The Options menu commands change display characteristics that affect the entire worksheet. You can display formulas rather than values in cells, set certain printing options, control how often you want Excel to recalculate worksheets, and protect a worksheet.

- The Macro menu commands name, define, and run macros. For more information on macros, see the separate manual, *Arrays, Functions, and Macros.*

- The Window menu makes it easy to open windows and the Clipboard, and to create new windows for open worksheets.

About Excel

```
 About Excel...
 ─────────────
 Scrapbook
 Alarm Clock
 Note Pad
 Calculator
 Key Caps
 Control Panel
 Puzzle
```

Apple Menu

About Excel

The About Excel command displays a dialog box with information about memory usage and help.

The help topics appear in the list box. Select a topic in the list, then click the Help button. Excel displays a window with information about that topic.

If you want to see information on another topic, click the Topics button to go back to the list of help topics. You can see the next help topic by clicking the Next button, and you can see the previous topic by clicking the Previous button.

An alternative to choosing About Excel is to press Command-? whenever you need help. The mouse pointer changes to a question mark, which you then move to the part of your screen where you need help. Use the question mark pointer to choose a command, click in a dialog box, or click in a portion of the window. When you click, Excel displays the help information in a window. If you click a dialog box, the dialog box stays on the screen, but is not active.

When the help information appears, you can use the Next, Previous, and Topics buttons as described above. If you want information about help itself, press Command-? again and Excel takes you to the description of help.
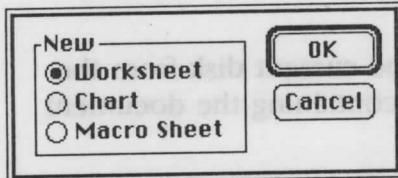
When you are finished reading the help information and want to return to your work, click the Cancel button.

See *Macintosh*, your owner's guide, for a discussion of the desk accessories listed on the Apple menu.

The File Menu

New

The New command creates an empty document in a new window.

When you choose the New command, Excel presents a dialog box in which you can choose the kind of document you want to create.

```
┌─New────────────┐  ┌────────┐
│ ● Worksheet    │  │   OK   │
│ ○ Chart        │  ├────────┤
│ ○ Macro Sheet  │  │ Cancel │
└────────────────┘  └────────┘
```

To create a new document, click the option for the kind of document you want to create, then click the OK button. You can also create a new document by double-clicking an option.

If you open a new chart while there is a selection on an active worksheet, Excel automatically plots the selection in the new chart.

To create a new window for a document that is already on your screen, use the New Window command from the Window menu.

For more information, see "Creating a Document" in Chapter 8.

Open

The Open command opens a document from the disk and displays it on your screen.

Open

```
File
New...        ⌘N
Open...       ⌘O
Open Links...
Close All
Save          ⌘S
Save As...
Delete...

Page Setup...
Print...      ⌘P
Printer Setup...

Quit          ⌘Q
```

```
┌───────────────────────────┐   Data Disk
│ Open Document             ⬆ │  ┌───────┐ ┌───────┐
│ Budget                      │  │ Open  │ │ Eject │
│ Expenses                    │  └───────┘ └───────┘
│ Mychart                     │  ┌───────┐ ┌───────┐
│                             │  │Cancel │ │ Drive │
│                           ⬇ │  └───────┘ └───────┘
└───────────────────────────┘
```
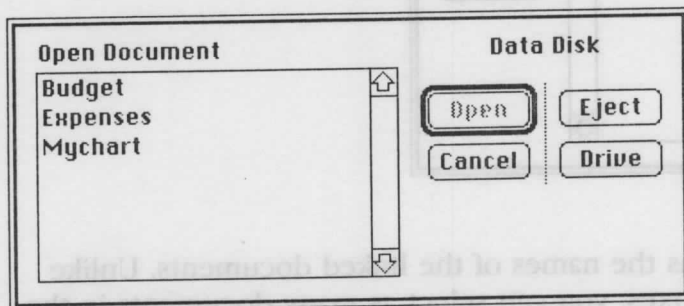
The list box contains a list of documents on the current disk.
The name of the current disk is shown above the buttons.

To open a document, either select the document you want to open and click the Open button, or double-click the name of the document.

In addition to the Open and Cancel buttons, there are two other buttons you can click:

Eject   Click the Eject button to eject the current disk from the disk drive. You can then insert the disk containing the document you want to open.

Drive   Click the Drive button to list the documents on the other disk drive.

Excel can open a document that is in WKS, SYLK, Text, Multiplan, or Excel format. Excel automatically recognizes the format and opens the document as an Excel document.

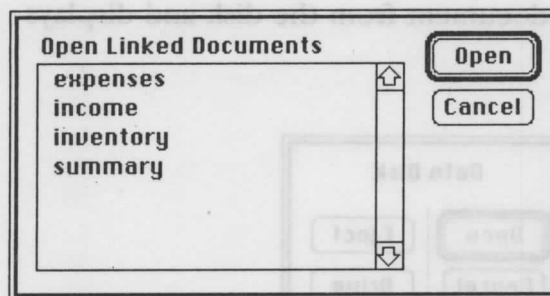For more information, see "Opening a Document" in Chapter 8. For information on opening dependent documents, see "Linking Documents" in Chapter 8.

Open Links

The Open Links command opens documents that are linked to the active document.

The list box contains the names of the linked documents. Unlike with other dialog boxes, you can select as many documents in the Open Links list box as you want.

You can select more than one document by using the same methods you use to select more than one cell in a worksheet.

- Drag to select a group of consecutively listed documents.
- Select the first document, scroll, then hold down the Shift key and click the document at the end of the group of documents you want to select.
- If the documents you want to open are not listed consecutively, hold down the Command key while clicking on each document you want to select.

When you have selected the documents you want to open, click the OK button.

For more information, see "Linking Documents" in Chapter 8.

Close All

The Close All command closes all of the windows on your screen. For each window containing a document with unsaved changes, a dialog box appears.

```
Save changes in
"Expenses"?

[ Yes ]   [ No ]   [ Cancel ]
```
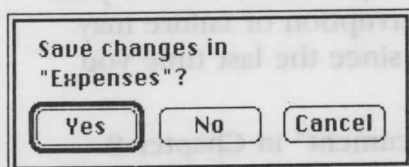
- Click the Yes button to save the changes.
- Click the No button if you don't want to save the changes.
- Click the Cancel button to stop the Close All command. If you click the Cancel button, no windows are closed, no documents are saved, and you return to the document you were working on when you chose Close All.

You can close one window at a time by clicking its close box.

For more information, see "Closing a Document" in Chapter 8.

Close All

```
File
  New...          ⌘N
  Open...         ⌘O
  Open Links...
  Close All
  Save            ⌘S
  Save As...
  Delete...

  Page Setup...
  Print...        ⌘P
  Printer Setup...

  Quit            ⌘Q
```

Save

```
File
  New...         ⌘N
  Open...        ⌘O
  Open Links...
  Close All
  Save           ⌘S
  Save As...
  Delete...

  Page Setup...
  Print...       ⌘P
  Printer Setup...

  Quit           ⌘Q
```

Save As

```
File
  New...         ⌘N
  Open...        ⌘O
  Open Links...
  Close All
  Save           ⌘S
  Save As...
  Delete...

  Page Setup...
  Print...       ⌘P
  Printer Setup...

  Quit           ⌘Q
```

Save

The Save command saves the active document on the disk from which it was opened. Excel saves the document with the name you used the last time you saved it, and replaces the old copy of the document on the disk.

You can only save documents that you have previously saved with the Save As command in either Normal or SYLK format. If you have not previously saved the document with the Save As command, or if you have deleted it from the disk from which it was opened, the Save command is dimmed on the menu. Use the Save As command to save a document that you have not previously saved, to save a document under a different name, or to save a document on a different disk.

After you save a document, the document remains on the screen so you can continue working on it. It is a good idea to save your work periodically, because a power interruption or failure may cause you to lose changes you've made since the last time you saved.

For more information, see "Saving a Document" in Chapter 8.

Save As

The Save As command saves new documents or new versions of existing ones.

```
Save Worksheet As:                    Data Disk
  ┌──────────────────────────┐
  └──────────────────────────┘          ┌─────────┐  ┌────────┐
                                         │  Save   │  │  Eject │
  ● Normal    ○ SYLK                     └─────────┘  └────────┘
  ○ Text      ○ WKS                      ┌─────────┐  ┌────────┐
                                         │ Cancel  │  │  Drive │
                                         └─────────┘  └────────┘
```

Save Worksheet As   If the document already has a name, Excel proposes it in the text box. To accept the proposed name, click the OK button. To save the document under a different name, edit the proposed name or type a new one. If you are saving a chart, this option changes to Save Chart As. If you are saving a macro sheet, this option changes to Save Macro Sheet As.

If the name you type has already been used for a different document on the disk, Excel asks you if you want to replace the existing file.

Click the Yes button to replace the document on your disk with the active document. Click the No button to display the Save As dialog box again. You can then type a different name for the document.

Drive You can save the document on either drive. Click the Drive button to change the disk on which you want to save the document.

Eject Click the Eject button to eject the current disk. You can then insert a different disk on which to save the document.

After you save a document with Save As, it remains on the screen, but its name changes to the name you gave it. You can continue to change it and save it under the same name with the Save command, or under another name with the Save As command if you want to keep different versions.

You can also save a document in the following formats so it can be used with other programs:

Normal Usually, Excel saves documents in Normal format. Save a document in Normal format if you are going to use the document with Excel or other Microsoft productivity software tools on the Macintosh, or if you plan to link worksheets.

SYLK Save a document in SYLK format to use the document with another Microsoft productivity tool on a different computer.

Text Save a document in Text format to save only the text and values as they are displayed in the cells on the worksheet. Excel separates the columns by tabs, but all other format information is lost.

WKS Save a document in WKS format to use the document with Lotus®1-2-3® or Symphony™ on the IBM® PC.

For more information, see "Saving a Document" in Chapter 8.

Delete

The Delete command deletes documents from your disk. When you choose Delete, Excel displays a dialog box.

Delete Document		Data Disk
Budget	⇧	
Expenses		[Delete] [Eject]
Inventory		
Salaries		[Cancel] [Drive]
Taxes	⇩	
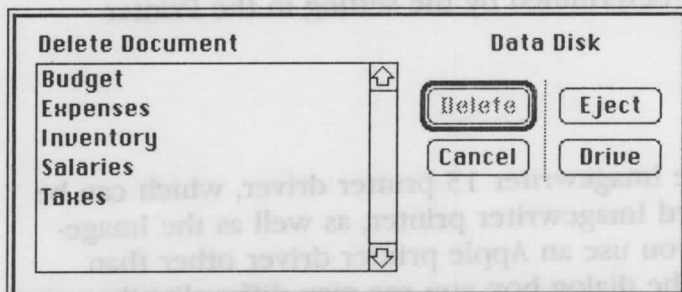
Delete

File	
New...	⌘N
Open...	⌘O
Open Links...	
Close All	
Save	⌘S
Save As...	
Delete...	
Page Setup...	
Print...	⌘P
Printer Setup...	
Quit	⌘Q

The list box contains the names of all documents and applications on the current disk, except systems documents. You may have to scroll in the list box to see the entire list. The name of the current disk is shown above the buttons.

Select the document you want to delete, and click the Delete button to delete the document from your disk. In addition to the Delete and Cancel buttons, there are two other buttons you can click:

Eject   Click the Eject button to eject the current disk from the disk drive. You can then insert the disk containing the document you want to delete.

Drive   Click the Drive button to list the documents on the other disk drive.

For more information, see "Deleting a Document" in Chapter 8.

Important   You cannot undo the Delete command from the File menu. If you delete a document, it is not retrievable. However, deleting a document removes it from the disk, but not from the screen. If you inadvertently delete a document from a disk, you can save the document with the Save As command, as long as the document is on the screen.

Page Setup

The Page Setup command controls the appearance of the printed document. When you save a document, Excel saves the settings for this command with the document.

There are two different Page Setup dialog boxes, one for the Imagewriter printer, and one for other printers. The dialog box that Excel displays is determined by the setting in the Printer Setup command.

Macintosh

Excel comes with the Imagewriter 15 printer driver, which can be used with the standard Imagewriter printer, as well as the Imagewriter 15 printer. If you use an Apple printer driver other than the Imagewriter 15, the dialog box you see may differ slightly from the one you see here.

Page Setup

File	
New...	⌘N
Open...	⌘O
Open Links...	
Close All	
Save	⌘S
Save As...	
Delete...	
Page Setup...	
Print...	⌘P
Printer Setup...	
Quit	⌘Q

When Macintosh is chosen in the Printer Setup command, you will see the following Page Setup dialog box:

```
┌─────────────────────────────────────────────────────────────┐
│ ImageWriter (Standard or Wide)              ┌──────────┐      │
│ ─────────────────────────────────────────  │    OK    │      │
│ Paper:   ◉ US Letter       ○ A4 Letter      └──────────┘      │
│          ○ US Legal        ○ International Fanfold ┌────────┐ │
│          ○ Computer Paper                    │ Cancel │      │
│ Orientation:  ◉ Tall    ○ Tall Adjusted   ○ Wide  └────────┘ │
│ Pagination:  ◉ Normal pages  ○ No breaks between pages        │
│ Reduction:   ◉ None      ○ 50 percent                         │
│ Page Header: [                                          ]     │
│ Page Footer: [                                          ]     │
│ Left Margin: [          ]    Right Margin: [          ]       │
│ Top Margin:  [          ]  .  Bottom Margin: [          ]     │
│ ☐ Print Row & Column Headings   ☐ Print Gridlines            │
└─────────────────────────────────────────────────────────────┘
```

Paper   Click an option:

US Letter	Letter size, 8-1/2 by 11 inches.
US Legal	Legal size, 8-1/2 by 14 inches.
Computer Paper	15-inch computer paper. This option works only if you have a 15-inch Imagewriter.
A4 Letter	European letter size, 8-1/4 by 11-2/3 inches.
International Fanfold	International fanfold, 8-1/4 by 12 inches.

Orientation   Click an option:

Tall	Vertical orientation.
Tall Adjusted	Vertical orientation; prints pictures in proportion.
Wide	Horizontal orientation.

Pagination   Excel normally leaves a space for the perforation at the top and bottom of each page. Click No Breaks Between Pages to print over the perforation.

Reduction Click None to print your document at normal size. Click 50 Percent to print your document at half the normal size. Because your documents are then reduced by 50 percent both vertically and horizontally, Excel can print four document pages on each sheet of paper.

Page Header If you want page headers, click in this box and type the text you want Excel to use as the header. Excel prints the page header at the top of each page, one-half inch from the top edge of the paper.

Page Footer If you want page footers, click in this box and type the text you want Excel to use as the footer. Excel prints the footer at the bottom of each page, one-half inch from the bottom edge of the paper.

You can tell Excel to justify parts of the header or footer to the left, right, or center; to include the page number, date, time, or document name; or to print in bold or italic.

Type this	To
&L	Align the characters that follow at the left margin.
&C	Center the characters that follow.
&R	Align the characters that follow at the right margin.
&P	Print the page number.
&D	Print the current date.
&T	Print the current time.
&F	Print the name of the document.
&B	Print the left, center, or right part of the header or footer in bold.
&I	Print the left, center, or right part of the header or footer in italic.
&&	Print a single ampersand.

You can include any or all of these instructions in a single header or footer. For example, you would type *&LBudget&C&P&R&D* to print "Budget" at the left margin, center the page number, and print the current date at the right margin.

Margins   The margin settings determine the amount of space between the edge of the paper and the printed worksheet.

The margins are preset to one inch at the top and bottom, and three-quarters of an inch on the sides. To change a margin, click in the margin box and type a number.

Print Row & Column Headings   Check this option if you want the row and column numbers printed.

Print Gridlines   Check this option to print the gridlines.

TTY

If you clicked TTY in the Printer Setup command, you will see the following dialog box when you choose Page Setup:

```
┌───────────────────────────────────────────────────────────┐
│  Printer Message: [            ]          ┌───────────┐    │
│                                           │    OK     │    │
│  Page Header:    [                    ]   └───────────┘    │
│                                           ┌───────────┐    │
│  Page Footer:    [                    ]   │  Cancel   │    │
│                                           └───────────┘    │
│  Left Margin:  [        ]   Print Width:  [        ]       │
│                                                           │
│  Top Margin:   [        ]   Print Length: [        ]       │
│                                                           │
│  ☐ Print Row & Column Headings                            │
└───────────────────────────────────────────────────────────┘
```

Printer Message   You can type in this box to send messages to the printer. Type a ^ to send a control character. For example, type ^O for Control-O. Type ^/ to send an escape character. For more information about printer codes see the owner's manual for your printer.

Page Header, Page Footer   These options are the same as the options in the Macintosh dialog box described above.

Margins   The margin settings determine the amount of space between the edge of the paper and the printed worksheet. You can set the left and top margins, and the print width and length.

For TTY printers, Excel measures margins by characters rather than inches. The numbers you type in the Margin boxes represent the width of the margins in numbers of characters.

Some printers may not accept left or right margins of zero. See your printer's manual for guidelines.

Print Row & Column Headings   Check this option if you want Excel to print the row and column numbers.

For more information, see "Printing a Document" in Chapter 8.

Print

```
┌─────────────────────────┐
│ File                    │
├─────────────────────────┤
│ New...              ⌘N  │
│ Open...             ⌘O  │
│ Open Links...           │
│ Close All               │
│ Save                ⌘S  │
│ Save As...              │
│ Delete...               │
│ ......................  │
│ Page Setup...           │
│ Print...            ⌘P  │
│ Printer Setup...        │
│ ......................  │
│ Quit                ⌘Q  │
└─────────────────────────┘
```

Print

The Print command prints the portion of the active worksheet you defined with the Set Print Area command from the Options menu.

If you do not set a print area, Excel prints the entire worksheet. When Excel prints a document, it applies all Page Setup settings, manual page breaks set with the Set Page Break command, and titles defined with the Set Print Titles command.

Macintosh

If Macintosh is chosen in the Printer Setup command, Excel presents a dialog box similar to the following one when you choose the Print command.

```
┌────────────────────────────────────────────────────────┐
│ ImageWriter (Standard or Wide)            ┌────────┐    │
│ ─────────────────────────────────────     │   OK   │    │
│ Quality:     ○ High    ● Standard  ○ Draft └────────┘    │
│ Page Range:  ● All     ○ From: [    ] To: [ ] ┌────────┐ │
│ Copies:      [1    ]                          │ Cancel │ │
│ Paper Feed:  ● Continuous  ○ Cut Sheet        └────────┘ │
│ ☐ Preview                                                │
└────────────────────────────────────────────────────────┘
```

Quality   This option will be dimmed if you clicked 50 Percent in the Page Setup command.

High	High resolution
Standard	Normal resolution
Draft	Low resolution

Resolution is the number of dots used to form characters on the page. High prints a high resolution of dots. Standard is less dense than high resolution, but takes less time to print. Draft is the lowest resolution, but it prints the fastest. Draft only prints text — no graphics.

Page Range   To print all the pages in the worksheet, click All. To print a range of pages from the worksheet, click in the From box and type the first page of the range you want to print. Then click in the To box, and type the last page of the range you want to print.

Copies   Type the number of copies you want.

Paper Feed   Click Continuous if you are using continuous form paper. Click Cut Sheet if you are using single sheets of paper.

Preview   Click this option to preview the pages on the screen, instead of sending them to the printer. When you click the OK button, Excel shows the first page of your document reduced to fit on the screen. Click the Next button or press any key to advance to the next page of the document.

While you are previewing a document, the pointer changes to a magnifying glass. Clicking in a page causes that part of the page to be shown full size. Click again to reduce the page to fit on the screen.

To move a page in the Preview window, press the Option key. The pointer changes to a hand, which you can then use to drag the page in the window.

To cancel previewing pages, click the Cancel button or press Command-. (period).

TTY

If you clicked TTY in the Printer Setup command, you will see a Print dialog box similar to the one below.

All of the options in this dialog box work the same way as the options in the Macintosh Print dialog box.

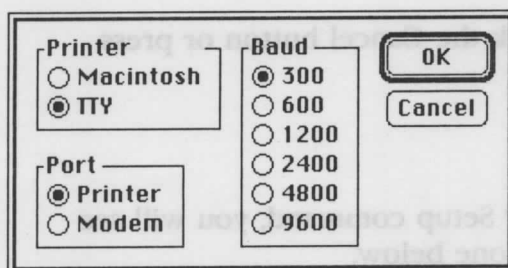For more information, see "Printing a Document" in Chapter 8.

Printer Setup

```
┌─ File ──────────────┐
│ New...          ⌘N  │
│ Open...         ⌘O  │
│ Open Links...       │
│ Close All           │
│ Save            ⌘S  │
│ Save As...          │
│ Delete...           │
│·····················│
│ Page Setup...       │
│ Print...        ⌘P  │
│ Printer Setup...    │
│·····················│
│ Quit            ⌘Q  │
└─────────────────────┘
```

Printer Setup

The Printer Setup command tells Excel how to set up your printer, or what kind of modem you are using.

Excel comes with the Imagewriter 15 printer driver, which supports both the standard Imagewriter and the wide carriage Imagewriter. You can also use Excel with other printers by clicking TTY.

```
┌───────────────────────────────────────────────┐
│  ┌─Printer──────┐  ┌─Baud──┐   ┌───────────┐   │
│  │ ○ Macintosh  │  │ ● 300 │   │    OK     │   │
│  │ ● TTY        │  │ ○ 600 │   └───────────┘   │
│  └──────────────┘  │ ○ 1200│   ┌───────────┐   │
│                    │ ○ 2400│   │  Cancel   │   │
│  ┌─Port─────────┐  │ ○ 4800│   └───────────┘   │
│  │ ● Printer    │  │ ○ 9600│                   │
│  │ ○ Modem      │  └───────┘                   │
│  └──────────────┘                              │
└───────────────────────────────────────────────┘
```

Printer This option does not define what kind of printer you are using; it defines how you are using it. For example, you can print a worksheet on a Macintosh printer using the TTY mode.

Click the Macintosh option when you want to print text and graphics on a Macintosh printer.

Click TTY when you want fast printing without graphics on a Macintosh printer, or when you want to use other printers. The TTY option prints text only — no charts or other graphics.
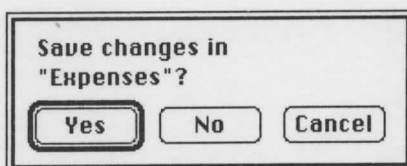
After you click Macintosh or TTY, click the appropriate port and baud options, then click the OK button. For more information on these settings, see the owner's manual for your printer or modem.

Quit

```
┌─ File ──────────────┐
│ New...          ⌘N  │
│ Open...         ⌘O  │
│ Open Links...       │
│ Close All           │
│ Save            ⌘S  │
│ Save As...          │
│ Delete...           │
│·····················│
│ Page Setup...       │
│ Print...        ⌘P  │
│ Printer Setup...    │
│·····················│
│ Quit            ⌘Q  │
└─────────────────────┘
```

Quit

The Quit command ends an Excel session. If you have made changes to the current documents but have not saved them, Excel presents a dialog box for each document.

```
┌──────────────────────────┐
│ Save changes in          │
│ "Expenses"?              │
│ ┌─────┐ ┌────┐ ┌────────┐│
│ │ Yes │ │ No │ │ Cancel ││
│ └─────┘ └────┘ └────────┘│
└──────────────────────────┘
```

- Click the Yes button to save your changes.
- Click the No button if you don't want to save your changes.
- Click the Cancel button to stop the Quit command. If you click the Cancel button, no documents are saved, and you return to the document you were working on when you chose Quit.

For a description of how to save your worksheet before you choose Quit, see the Save command.

Whether you save your worksheet or not, the Clipboard is always saved when you quit Excel. If a copied selection is marqueed on the worksheet when you quit, Excel copies the selection to the Clipboard. For information on using the Clipboard, see the Show Clipboard command.

When you quit, Excel also saves the arrangement of your windows and documents in a document called Resume Excel. The next time you start Excel, you can double-click the Resume Excel icon. Excel starts and resets the size and location of the windows, and the documents in them, exactly as they were when you quit.

The Edit Menu

Undo

The Undo command reverses editing commands in the worksheet and the formula bar.

You can undo a command until you choose another command. Any command in the Edit menu, including Undo, is reversed when you choose the Undo command. You can also undo typing in the formula bar, and entering a formula or value on the worksheet.

Important   You cannot undo the Delete command from the File menu, or the Delete and Sort commands from the Data menu.

For more information, see "Undoing Editing Commands" in Chapter 5.

Undo

Edit	
Undo	⌘Z
Cut	⌘H
Copy	⌘C
Paste	⌘U
Clear...	⌘B
Paste Special...	
Delete...	⌘K
Insert...	⌘I
Fill Right	⌘R
Fill Down	⌘D

Cut

Edit

Undo	⌘Z
Cut	⌘H
Copy	⌘C
Paste	⌘U
Clear...	⌘B
Paste Special...	
Delete...	⌘K
Insert...	⌘I
Fill Right	⌘R
Fill Down	⌘D

Cut

The Cut command defines a selection that will be moved when you choose the Paste command. You can cut cells from a worksheet, or text from the formula bar.

To move cells, select the cell range you want to move. The selected range must be a single, continuous rectangular area. When you choose Cut, Excel outlines the selected cells with a marquee, but does not move them until you choose the Paste command.

The Cut command and the Delete command from the Edit menu affect cells differently. Cut is the first step in moving cells to another part of the worksheet. The Delete command deletes cells from the worksheet and closes up the space they occupied.

Unlike those cut with the regular Macintosh Cut command, items cut to the Clipboard do not stay there after you paste. If you want to do more than one paste, use the Copy command.

When you are editing in the formula bar, you can cut text by selecting the text and choosing Cut. Excel removes the selected text from the formula and puts it in the Clipboard, replacing the Clipboard's contents. After you cut a selection, you can paste it into an insertion point in the formula bar.

For more information, see "Moving Information" in Chapter 5.

Copy

Edit

Undo	⌘Z
Cut	⌘H
Copy	⌘C
Paste	⌘U
Clear...	⌘B
Paste Special...	
Delete...	⌘K
Insert...	⌘I
Fill Right	⌘R
Fill Down	⌘D

Copy

The Copy command defines a selection that will be copied when you choose the Paste command. You can copy cells from a worksheet, or text from the formula bar.

To copy cells, select the cell range you want to copy. The selected range must be a single, continuous rectangular area. When you choose Copy, Excel outlines the selected cells with a marquee.

After you copy a cell range, you can paste it into other cells on the worksheet, or create a data series in a chart.

When you are editing in the formula bar, you can copy text by selecting it and choosing Copy. Excel puts a copy of the selected text into the Clipboard, replacing the Clipboard's contents. After you copy a selection, you can paste it into an insertion point in the formula bar.

To copy a picture of a selection into the Clipboard, hold down the Shift key while you choose Copy, or press Shift-Command-C. Excel copies the selection into the Clipboard. In the Clipboard, values appear as they did on the worksheet. For example, if values

were right-aligned on the worksheet, they will be right-aligned in the Clipboard.

For more information, see "Copying Information" in Chapter 5.

Paste

The Paste command inserts a selection that you defined with the Copy or Cut command. In a worksheet, Paste inserts the copied or cut cells into the selected cells. In the formula bar, Paste either inserts the contents of the Clipboard at an insertion point, or replaces any selected text with the Clipboard contents.

To paste cells you have cut or copied, select the paste area. The paste area can be a single cell, or a range of cells. If the paste area is a single cell, Excel matches it to the upper-left cell of the copy or cut area, and fills the rest of the range down and to the right.

When you choose the Copy command before you paste, you can paste multiple copies. To paste multiple copies, the paste area must be a selection or multiple selection able to contain two or more rectangles of exactly the same size and shape as the copy area. When you paste, Excel duplicates the copy area to fill the paste area.

When you choose the Cut command before you paste, the paste area must be exactly the same size as the cut area.

The Paste command pastes all cell properties for every cell pasted, including formula or value, numeric format, gridlines, style, alignment, and lock status. If you want to paste only certain cell properties, use the Paste Special command.
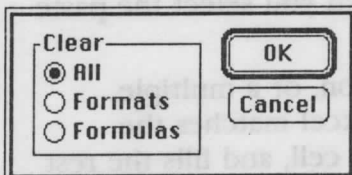
To copy cell formulas, values, and formats in a single row or column to adjoining cells, use the Fill Down or Fill Right commands.

For more information, see "Copying Information" in Chapter 5.

Clear

The Clear command removes a selection's formulas or values, its format, or both.

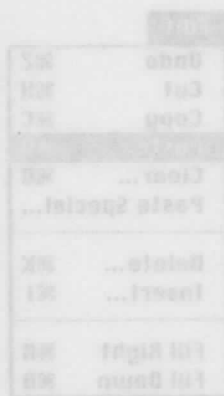Select the cells you want to clear, then choose Clear.

Paste

```
Edit
Undo          ⌘Z
Cut           ⌘H
Copy          ⌘C
Paste         ⌘U
Clear...      ⌘B
Paste Special...

Delete...     ⌘K
Insert...     ⌘I

Fill Right    ⌘R
Fill Down     ⌘D
```

Clear

```
Edit
Undo          ⌘Z
Cut           ⌘H
Copy          ⌘C
Paste         ⌘U
Clear...      ⌘B
Paste Special...

Delete...     ⌘K
Insert...     ⌘I

Fill Right    ⌘R
Fill Down     ⌘D
```

```
┌Clear──────        ┌──────────┐
 ◉ All              │    OK    │
 ○ Formats          └──────────┘
 ○ Formulas         ┌──────────┐
                    │  Cancel  │
                    └──────────┘
```

All Click All to clear the formulas or values, and the formats of the selection. Excel blanks the cells and returns them to General format.

Formats Click Formats to clear only the formats of the selection, and return them to General format.

Formulas Click Formulas to clear all formulas and values from the selection, without affecting the format.

If you want to clear formulas or values, and formats, you can quickly bypass the menu and the dialog box by pressing Command-B. Command-B is the same as choosing Clear, clicking All in the dialog box, and clicking the OK button.

You can retrieve cells you cleared by choosing the Undo command before you choose another command.

To remove cells and close up space, you use the Delete command. An important difference between clearing cells and deleting them occurs when other cells have formulas that refer to the cleared or deleted cells. For a formula containing a reference to a cleared cell, Excel assumes the cleared cell has a value of zero. For a formula containing a reference to a deleted cell, Excel is unable to find the deleted cell and displays the #REF! error value.

This difference is important, because when Excel assumes a value of zero for cleared cells, formulas referring to them may produce inaccurate results.

For more information, see "Clearing Information" in Chapter 5.

Paste Special

Paste Special

| Edit	
Undo	⌘Z
Cut	⌘H
Copy	⌘C
Paste	⌘U
Clear...	⌘B
Paste Special...	
Delete...	⌘K
Insert...	⌘I
Fill Right	⌘R
Fill Down	⌘D

The Paste Special command takes parts of the cells you define with the Copy command, and combines them with the cells in the selection. You choose what parts Excel pastes, and how they are pasted.

You must first use the Copy command to define the copy area containing the cells you will be pasting. Then you select the paste area.

The paste area can be a single cell, a selection, or a multiple selection. If the paste area is a single cell, Excel matches the upper-left cell of the copy area to the single cell, and fills the rest of the range down and to the right.

If the paste area is a selection or multiple selection, each selection in the paste area must be able to contain one or more rectangles of exactly the same size and shape as the copy area. If the paste area contains two or more rectangles the size and shape of the copy area, Excel duplicates the copy area to fill the paste area.
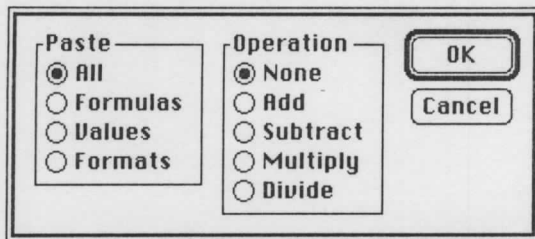
Paste   Click an option to tell Excel which parts of the cells in the copy area to paste.

All	Copies all cell properties
Formulas	Copies only formulas in the cells
Values	Copies only values that appear in the cells
Formats	Copies only formats of the cells

Operation   Click an option to define how you want the cells in the copy area to combine with the cells in the paste area.

None	Replaces the cells in the paste area with the cells in the copy area. Copying all parts with this operation is the same as cutting and pasting.
Add	Adds the selected parts of the copy area cells to the paste area cells.
Subtract	Subtracts the selected parts of the copy area cells from the paste area cells.
Multiply	Multiplies the paste area cells by the selected parts of the copy area cells.
Divide	Divides the paste area cells by the selected parts of the copy area cells.

Excel assumes that blank cells in the paste area have a value of zero.

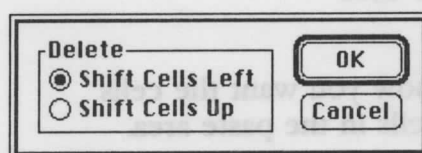For more information, see "Copying Information" in Chapter 5.

Delete

```
┌─ Edit ──────────┐
│ Undo        ⌘Z  │
│ Cut         ⌘H  │
│ Copy        ⌘C  │
│ Paste       ⌘U  │
│ Clear...    ⌘B  │
│ Paste Special...│
│ ·············· │
│ ▒Delete...  ⌘K▒ │
│ Insert...   ⌘I  │
│ ·············· │
│ Fill Right  ⌘R  │
│ Fill Down   ⌘D  │
└─────────────────┘
```

Delete

The Delete command removes the selection from a worksheet.

When you delete a selection, Excel shifts the other cells to fill in the space. In the Delete dialog box, you can specify whether to shift cells up, or to the left. When you delete entire rows or columns, no dialog box appears, and Excel shifts cells automatically.

```
┌──────────────────────────────┐
│ ┌─Delete─────────┐  ┌─ OK ─┐  │
│ │ ● Shift Cells Left│ └──────┘  │
│ │ ○ Shift Cells Up │  ┌Cancel┐ │
│ └────────────────┘  └──────┘  │
└──────────────────────────────┘
```

Shift Cells Left   Click this option to shift the cells to the right of the selection left.

Shift Cells Up   Click this option to shift the cells below the selection up.

To carry out the command, click an option and click the OK button, or double-click the option.

When you delete cells, the formulas, values, and formats are removed as well. To remove only certain parts of a cell, use the Clear command.

For more information, see "Deleting Cells and Closing Up Space" in Chapter 5. For information on the difference between deleting cells and clearing cells, see the Clear command.
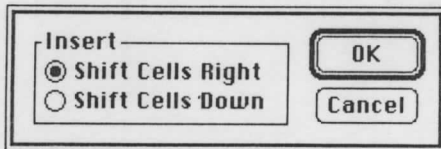
Insert

```
┌─ Edit ──────────┐
│ Undo        ⌘Z  │
│ Cut         ⌘H  │
│ Copy        ⌘C  │
│ Paste       ⌘U  │
│ Clear...    ⌘B  │
│ Paste Special...│
│ ·············· │
│ Delete...   ⌘K  │
│ ▒Insert...  ⌘I▒ │
│ ·············· │
│ Fill Right  ⌘R  │
│ Fill Down   ⌘D  │
└─────────────────┘
```

Insert

The Insert command inserts a blank cell or range of cells into a worksheet.

To insert a blank cell or cells, select the area of the worksheet where you want the cells inserted, then choose the Insert command. Excel inserts the same number of cells you selected before you chose Insert.

```
┌Insert─────────┐    ┌─────────┐
│ ⦿ Shift Cells Right │    │   OK    │
│ ○ Shift Cells Down  │    ├─────────┤
└───────────────┘    │ Cancel  │
                      └─────────┘
```

Shift Cells Right Click this option to shift the selection to the right when Excel inserts cells.

Shift Cells Down Click this option to shift the selection down when Excel inserts cells.

Click one of the options, then click the OK button to shift the selection and insert blank cells. Or, you can double-click the option.

No dialog box appears if you are inserting entire rows or columns.

For more information, see "Inserting Space" in Chapter 5.

Fill Right

The Fill Right command copies the cells in the leftmost column of a selection into the rest of the columns in the selection.

You can have either a single or a multiple selection. If you have a multiple selection, Excel fills each selection separately, copying the cells in the left column of each selection into the columns to the right.

Excel copies the formulas, values, and formats of the cells in the left column of the selection, and replaces all formulas, values, and formats of the other cells in the selection.

For more information, see "Copying Information" in Chapter 5.

Fill Right

```
┌─Edit────────────┐
│ Undo          ⌘Z │
│ Cut           ⌘H │
│ Copy          ⌘C │
│ Paste         ⌘U │
│ Clear...      ⌘B │
│ Paste Special... │
├──────────────────┤
│ Delete...     ⌘K │
│ Insert...     ⌘I │
├──────────────────┤
│ Fill Right    ⌘R │
│ Fill Down     ⌘D │
└──────────────────┘
```

Fill Down

The Fill Down command copies the cells in the top row of a selection into the rest of the rows in the selection.

You can have either a single or a multiple selection. If you have a multiple selection, Excel fills each selection separately, copying the cells in the top row of each selection into the cells below it.

Excel copies the formulas, values, and formats of the cells in the top row of the selection, and replaces all formulas, values, and formats of the other cells in the selection.

For more information, see "Copying Information," in Chapter 5.

Fill Down

```
┌─Edit────────────┐
│ Undo          ⌘Z │
│ Cut           ⌘H │
│ Copy          ⌘C │
│ Paste         ⌘U │
│ Clear...      ⌘B │
│ Paste Special... │
├──────────────────┤
│ Delete...     ⌘K │
│ Insert...     ⌘I │
├──────────────────┤
│ Fill Right    ⌘R │
│ Fill Down     ⌘D │
└──────────────────┘
```
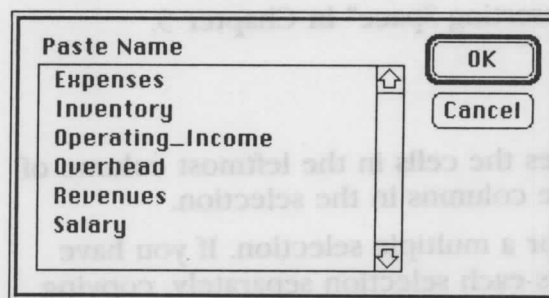
Paste Name

```
Formula
Paste Name...
Paste Function...
Reference        ⌘T

Define Name...   ⌘L
Create Names...

Goto...          ⌘G
Find...          ⌘H
Select Last Cell
Show Active Cell
```

The Formula Menu

Paste Name

The Paste Name command pastes a name into the formula bar from the list of names defined for the active worksheet.

When you choose Paste Name, Excel displays a dialog box.

```
┌─────────────────────────────────────────────┐
│ Paste Name                                    │
│ Expenses            ⇧    ┌──────────┐        │
│ Inventory                │    OK    │        │
│ Operating_Income         └──────────┘        │
│ Overhead                 ┌──────────┐        │
│ Revenues                 │  Cancel  │        │
│ Salary              ⇩    └──────────┘        │
└─────────────────────────────────────────────┘
```

Select the name you want to paste into the formula and click the OK button. If the formula bar is inactive, Paste Name activates it and pastes an equal sign (=) followed by the name you select. If the formula bar is active, Excel pastes the name at the insertion point. If you don't put an operator before a pasted name, Excel includes a plus sign (+).

If there are no names defined on the current document, this command is dimmed. Use the Define Name or the Create Names command to define names.

Paste Name is particularly useful when you construct large worksheets. Used with Define Name and Create Names, Paste Name helps you simplify formulas and avoid having to remember cell references.

For more information, see "Names" in Chapter 4.

Paste Function

The Paste Function command pastes a function into the formula bar.

```
Paste Function                    [  OK  ]
  ABS()                    ↑
  AND()                            [Cancel]
  ATAN()
  AVERAGE()
  COLUMN()
  COS()
  COUNT()                  ↓
```
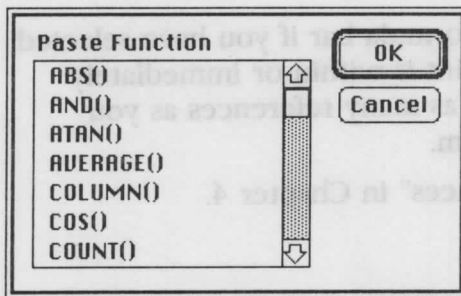
The list box contains a list of all available Excel functions, as well as any functions you have defined in a macro sheet that is currently open. A function defined in a macro sheet is preceded by an exclamation point and the name of the macro sheet containing the function.

To paste a function, select the function you want from the list, then click the OK button. If the formula bar is inactive, Paste Function activates it and pastes an equal sign (=), followed by the function you select. If the formula bar is active, Excel pastes the function at the insertion point. If you don't put an operator before a pasted function, Excel includes a plus sign (+).

Although Paste Function provides a list of all available functions that you can look through and choose from, you can bypass this command by typing a function directly into a formula. For a complete list of functions and what they do, see *Arrays, Functions, and Macros.* For more information on pasting a function, see "Functions" in Chapter 4.

Reference

When the formula bar is active, the Reference command changes selected references in the formula.

Excel changes references from relative to absolute, from absolute to mixed, and from mixed back to relative. The following illustration shows this order:

A1 ⟶ $A$1 ⟶ A$1 ⟶ $A1 ⟶ A1
R[-1]C[-1] ⟶ R1C1 ⟶ R1C[-1] ⟶ R[-1]C1 ⟶ R[-1]C[-1]
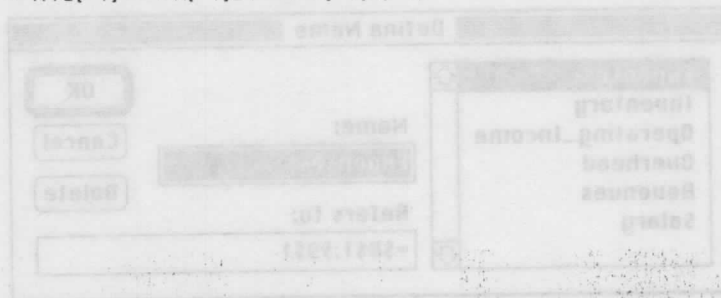
Reference

Formula
Paste Name...
Paste Function...
Reference   ⌘T

Define Name...   ⌘L
Create Names...

Goto...   ⌘G
Find...   ⌘H
Select Last Cell
Show Active Cell

Define Name

```
┌─────────────────────────┐
│ Formula                 │
├─────────────────────────┤
│ Paste Name...           │
│ Paste Function...       │
│ Reference          ⌘T   │
├─────────────────────────┤
│ Define Name...     ⌘L   │
│ Create Names...         │
├─────────────────────────┤
│ Goto...            ⌘G   │
│ Find...            ⌘H   │
│ Select Last Cell        │
│ Show Active Cell        │
└─────────────────────────┘
```

Excel converts a reference in the formula bar if you have selected the reference, or if an insertion point is within or immediately after the reference. You can select as many references as you want, and Excel converts all of them.

For more information, see "References" in Chapter 4.

Define Name

The Define Name command creates a name for a cell range, a value, or a formula.

The name you define can be used in formulas or other name definitions. You can also edit or delete names with this command.

The first character of any name must be a letter. Names can be up to 255 characters long, and can contain any letter or digits, or a period. A name cannot contain spaces; use the underline character (_) instead. Excel does not accept names that resemble a number or cell reference.

A selection you name can contain any number of cells. You can also name a multiple selection, as long as it is not made up of more than 20 individual selections.

If the Define Name dialog box is covering a cell you want to select, you can move the dialog box by dragging it like you drag other windows.

You can also use Define Name to define values or formulas that aren't in cells. For example, if you want to include the rate of inflation in a formula, you can use Define Name to define inflation without putting it in a cell. Choose Define Name, type *Inflation* into the Name box, and type the current rate of inflation into the Refers To box. You can then include Inflation in any formula, and Excel uses the value you typed in the Refers To box.

You can change the rate of inflation as often as you want by choosing Define Name, selecting Inflation in the list box, and changing the value in the Refers To box. Every time you change what rate Inflation refers to, Excel updates all formulas that contain the name Inflation.

```
╔═══════════════════ Define Name ═══════════════════╗
║                                                   ║
║  ┌──────────────────────┐ ⇧                       ║
║  │ Expenses             │                  ┌──────┐║
║  │ Inventory            │   Name:          │  OK  │║
║  │ Operating_Income     │  ┌────────────┐  └──────┘║
║  │ Overhead             │  │ Expenses   │  ┌──────┐║
║  │ Revenues             │  └────────────┘  │Cancel│║
║  │ Salary               │   Refers to:     └──────┘║
║  │                      │ ⇩ ┌────────────┐ ┌──────┐║
║  └──────────────────────┘   │=$B$1:$D$1  │ │Delete│║
║                             └────────────┘ └──────┘║
╚═══════════════════════════════════════════════════╝
```

Name   If there is any text in the active cell, Excel proposes it as the name. If the active cell is blank, Excel proposes text in the cell to the left or above. Excel does not propose a name if none of these cells has text.

You can use the proposed response, select one of the names in the list box, type a new name, or edit the proposed response. You can edit a name in the Name box the same way you edit text in the formula bar.

If you use a name that you have already defined, that name changes to apply only to the selection you are naming.

Refers To   If you are defining a new name, Excel proposes the selection. If the name is already defined, Excel proposes the range, value, or formula that this name currently refers to.

The Refers To box works just like the formula bar. When you are editing in it, you can make worksheet selections, choose formula editing commands like Paste Name and Reference, and activate and move windows.

The Refers To box accepts cell references, values, or formulas. Formulas can include other names and functions, and relative references. For example:

Growth = Inflation/2

Net = Gross − Taxes

Difference = $A$2 − $A$1

Delete   You can delete a name with this option. To delete a name, select the name from the list box and click the Delete button.

When you delete a name, the cells and their formulas or values are not affected; Excel just removes the name. If the deleted name is a part of any formulas, #NAME? appears in those formulas in place of the deleted name, and any cell containing that formula displays #NAME? as its value.

If you choose the Define Name command when a macro sheet is active, you will see a slightly different dialog box. This dialog box is the same as the worksheet dialog box except for the Macro options.

```
┌──────────────────── Define Name ────────────────────┐
│                                                      │
│  ┌─────────────────────────┐  ┌──────┐               │
│  │ Delete.Entry         ⇧ │  │  OK  │               │
│  │ Edit.Entry             │  └──────┘               │
│  │ Find.Entry             │  Name:    ┌────────┐     │
│  │ Replace.Entry          │  ┌──────┐ │ Cancel │     │
│  │ Setup.Criteria         │  │Delete.Entry│      │     │
│  │ Setup.Database         │  └──────┘ ┌────────┐     │
│  │                      ⇩ │  Refers to:│ Delete │     │
│  └─────────────────────────┘  =$A$1   └────────┘     │
│                                                      │
│  ┌─Macro────────────────────────────────────────┐   │
│  │ ○ Function  ● Command  Option-⌘ Key: [ D ]    │   │
│  └───────────────────────────────────────────────┘  │
└──────────────────────────────────────────────────────┘
```
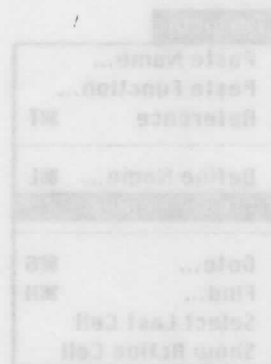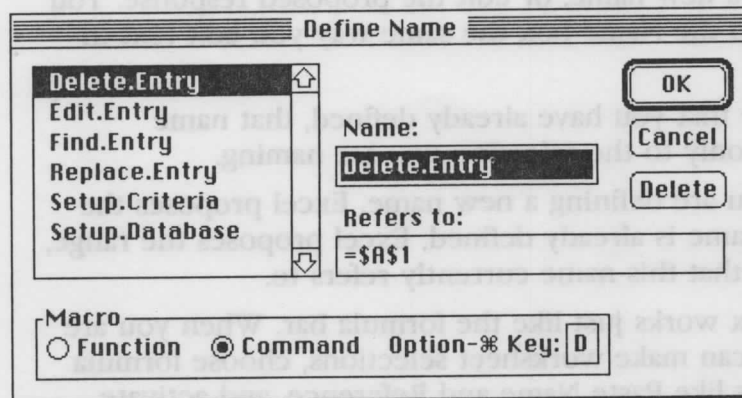
Macro When you define a macro name, click an option to identify the macro as either a function macro or a command macro. You can also assign an Option-Command key sequence for command macros.

For more information on names, see "Names" in Chapter 4. For more information on macros, see *Arrays, Functions, and Macros.*

Create Names

```
┌─Formula──────────────┐
│ Paste Name...        │
│ Paste Function...    │
│ Reference        ⌘T  │
│----------------------│
│ Define Name...   ⌘L  │
│ Create Names...      │
│----------------------│
│ Goto...          ⌘G  │
│ Find...          ⌘H  │
│ Select Last Cell     │
│ Show Active Cell     │
└──────────────────────┘
```

The Create Names command quickly names many areas of a worksheet at once.

When you select the range of cells you want to name, include the text to be used as names in the left column or top row, or both, of the selection. Then, choose Create Names.
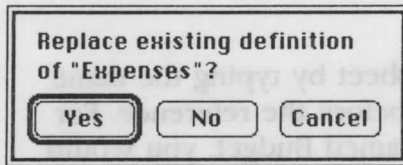
```
┌─Create Names in─┐ ┌──────┐
│ ☐ Top Row       │ │  OK  │
│ ☐ Left Column   │ └──────┘
└─────────────────┘ ┌──────┐
                    │Cancel│
                    └──────┘
```
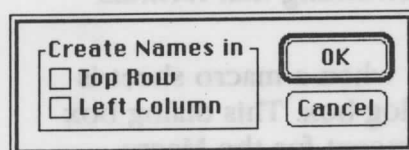
Top Row If you check Top Row, Excel uses the text in each cell of the top row of the selection to name the column below it.

Left Column If you check Left Column, Excel uses the text in each cell of the left column of the selection to name the row to the right of it.

You can check both options to create names in both directions. If you check both options, and the cell in the upper-left corner of the selection contains text, Excel uses that text to name the entire selection.

After you check one or both of the options, click the OK button to carry out the command. If any of the names are already defined, Excel presents a dialog box that looks like this:
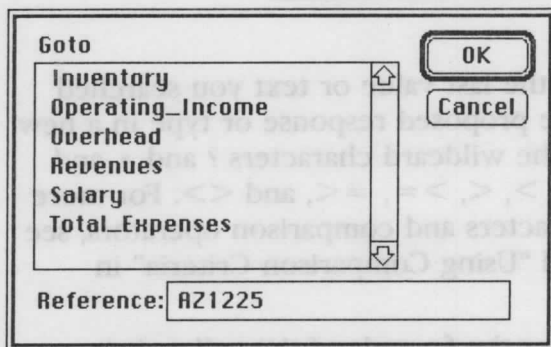
```
┌─────────────────────────────┐
│ Replace existing definition  │
│ of "Expenses"?               │
│ ┌──────┐ ┌──────┐ ┌────────┐│
│ │ Yes  │ │  No  │ │ Cancel ││
│ └──────┘ └──────┘ └────────┘│
└─────────────────────────────┘
```

■ If you click the Yes button, the name takes on the new definition.

■ If you click the No button, the name keeps its current definition, and the cells that would have been affected remain unnamed.

■ If you click the Cancel button, you stop the command, but Excel remembers any names that you defined before you clicked the Cancel button.

Goto

The Goto command quickly scrolls the worksheet and selects the reference you specify.

In the dialog box, you can type a cell reference or a name, or select a name from the list box.

```
┌──────────────────────────────────────┐
│ Goto                    ┌──────────┐  │
│ ┌────────────────────┐  │    OK    │  │
│ │ Inventory        ▲ │  └──────────┘  │
│ │ Operating_Income   │  ┌──────────┐  │
│ │ Overhead           │  │  Cancel  │  │
│ │ Revenues           │  └──────────┘  │
│ │ Salary             │                │
│ │ Total_Expenses   ▼ │                │
│ └────────────────────┘                │
│ Reference: [ AZ1225            ]       │
└──────────────────────────────────────┘
```

If you want to go to a specific cell, type the reference for that cell and click the OK button.

You can also go to a named area. The names in the current worksheet appear in the list box. If you select a name and click the OK button, Excel scrolls to the upper-left cell of the named area and selects the entire named area.

Goto

```
┌──────────────────────────┐
│ Formula                  │
├──────────────────────────┤
│ Paste Name...            │
│ Paste Function...        │
│ Reference           ⌘T   │
├──────────────────────────┤
│ Define Name...      ⌘L   │
│ Create Names...          │
├──────────────────────────┤
│ Goto...             ⌘G   │
│ Find...             ⌘H   │
│ Select Last Cell         │
│ Show Active Cell         │
└──────────────────────────┘
```
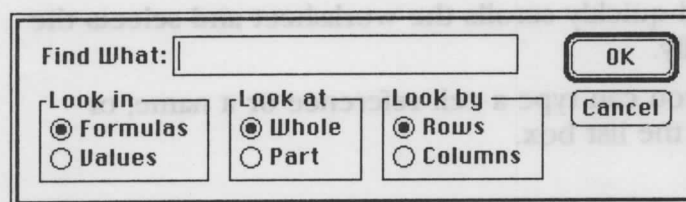
You can go to a reference on another sheet by typing the name of the sheet and an exclamation point before the reference. For example, to go to B3 on a worksheet named Budget, you would type *Budget!B3*.

For more information, see "Selecting Parts of a Worksheet" in Chapter 4.

Find

Find

The Find command locates text or a value within either a cell or formula, and makes the cell containing it the active cell. The Find command is particularly useful for finding #REF! and #NAME? error values caused by deleting cells or names.

If you select a range of cells, Excel searches only within that range. Otherwise, Excel searches the entire worksheet.

Formula	
Paste Name...	
Paste Function...	
Reference	⌘T
Define Name...	⌘L
Create Names...	
Goto...	⌘G
Find...	**⌘H**
Select Last Cell	
Show Active Cell	

Find What: [   ] [OK]   [Cancel]

Look in
- ● Formulas
- ○ Values

Look at
- ● Whole
- ○ Part

Look by
- ● Rows
- ○ Columns

Find What   Excel proposes the last value or text you searched for. You can either accept the proposed response or type in a new one. The value may include the wildcard characters ? and *, and the comparison operators =, >, <, >=, =<, and <>. For more information on wildcard characters and comparison operators, see "Operators" in Chapter 4, and "Using Comparison Criteria" in Chapter 6.

Look In   Excel looks in either the formula of the cell as it is displayed in the formula bar, or the value as it is displayed in the cell. Click one of the options.

Look At   Excel matches the text or value it is trying to find with either the entire value or formula it searches, or any part of the value or formula. Click one of the options.

Look By   Excel searches by rows or columns. If the active size of your worksheet is large, and you have some idea of the area you want to search, it may be faster to search in a specific direction. This option is also useful if you want to find cells in a certain order. Click the direction you want Excel to search.

When you have set all the options, click the OK button to carry out the command.

For more information, see "Finding a Reference or Value" in Chapter 5.

Note If you press Command-H instead of choosing Find from the Formula menu, Excel does not display the Find dialog box, but immediately searches for the last text or value searched for. You can use Command-H to quickly search for repeat occurrences of the text or value.

Select Last Cell

The Select Last Cell command selects the cell at the intersection of the last row and column that contain a formula, value, or format.

Placing any number or text outside the general work area, or even formatting a cell, can extend the worksheet unnecessarily and use more memory than you need to.

If you think your worksheet may be using too much memory, use Select Last Cell to determine the extent of the worksheet.

For more information, see "Selecting Parts of a Worksheet" in Chapter 4.

Show Active Cell

The Show Active Cell command scrolls the worksheet until the active cell is visible. This command is useful if you scroll the worksheet away from the active cell and want to return to it quickly.

Select Last Cell

```
Formula
Paste Name...
Paste Function...
Reference          ⌘T

Define Name...     ⌘L
Create Names...

Goto...            ⌘G
Find...            ⌘H
Select Last Cell
Show Active Cell
```

Show Active Cell

```
Formula
Paste Name...
Paste Function...
Reference          ⌘T

Define Name...     ⌘L
Create Names...

Goto...            ⌘G
Find...            ⌘H
Select Last Cell
Show Active Cell
```

Number
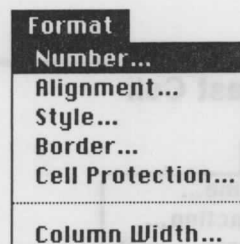
The Format Menu

Number

The Number command determines how Excel displays numbers, dates, and times.

When you choose Number, Excel displays a dialog box with number formatting choices in a list box. You can scroll the list box to see all the available formats.

```
Format Number                    [ OK ]
General                    ⇧
0                                [ Cancel ]
0.00
#,##0                            [ Delete ]
#,##0.00
$#,##0 ;($#,##0)
$#,##0.00 ;($#,##0.00)      ⇩

Format: General
```
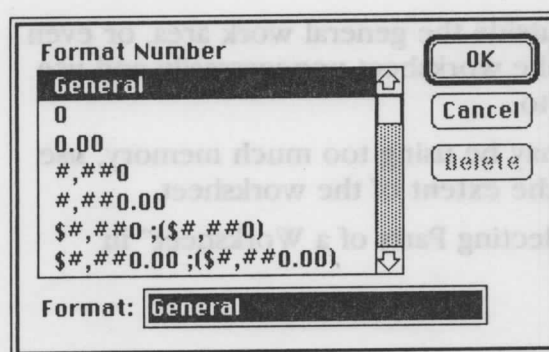
Except for General format, the choices in the list box are symbols that represent what each format looks like.

Unless you specify a different format, Excel uses General format. General format displays numbers in the selection as precisely as possible. If the number is longer than what will fit in the cell, Excel displays it in scientific notation.

The following table lists the symbols and shows examples of each format for positive values, negative values, and fractions.

| Format | Number typed | | |
	5	-5	.5
General	5	-5	0.5
0	5	-5	1
0.00	5.00	-5.00	1.00
#,##0	5	-5	1
#,##0.00	5.00	-5.00	0.50
$#,##0 ;($#,##0)	$5	($5)	$1
$#,##0.00 ;($#,##0.00)	$5.00	($5.00)	$0.50
0%	500%	-500%	50%
0.00%	500.00%	-500.00%	50.00%
0.00E+00	5.00E+00	-5.00E+00	5.00E-01

Note that the dollar formats produce trailing spaces for positive numbers.

The list box for Number also lists date and time formats. Excel displays times and dates with the following formats:

Format	Display
m/d/yy	12/7/58
d-mmm-yy	7-Dec-58
d-mmm	7-Dec
mmm-yy	Dec-58
h:mm AM/PM	8:50 PM
h:mm:ss AM/PM	8:50:35 PM
h:mm	20:50
h:mm:ss	20:50:35
m/d/yy h:mm	12/7/58 20:50

Excel uses some of these formats automatically. For more information, see "Entering a Date or Time" in Chapter 4.

Excel comes with several number formats, but you can also create your own. The ability to create your own formats is useful because you can make your worksheet appear exactly the way you want.

For information on creating number formats and an explanation of the symbols used, see "Formatting Numbers" in Chapter 5.

Alignment

The Alignment command sets the alignment for the values of the selected cells.

Initially, all cells in the worksheet use General alignment. With General alignment, Excel aligns text to the left and numbers to the right, and centers logical and error values. To change the alignment, choose the Alignment command and click an option in the dialog box.
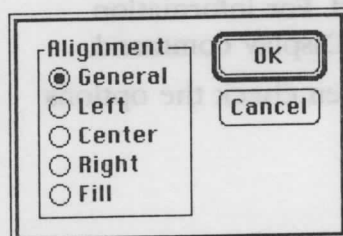
Alignment
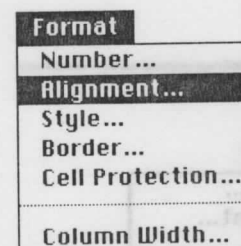
```
Format
  Number...
  Alignment...
  Style...
  Border...
  Cell Protection...
  ........................
  Column Width...
```

```
┌Alignment─┐   ┌────────┐
│ ● General │   │   OK   │
│ ○ Left    │   └────────┘
│ ○ Center  │   ┌────────┐
│ ○ Right   │   │ Cancel │
│ ○ Fill    │   └────────┘
└───────────┘
```
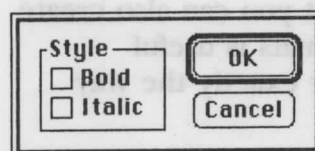
Except for General, each option aligns text, numbers, logical values, and error values the same way: Left aligns all values to the left, Center centers all values, and Right aligns all values to the right. Fill repeats the values until the cell is full. If there are blank cells to the right that also have the Fill format, Excel fills them as well.

For more information, see "Aligning Values" in Chapter 5.

Style

Style

```
┌─────────────────┐
│ Format          │
│  Number...      │
│  Alignment...   │
│  Style...       │
│  Border...      │
│  Cell Protection...│
│  ...............│
│  Column Width...│
└─────────────────┘
```

The Style command changes the style of all values in the selection.

Values can be bold, italic, or both. Select a cell or range of cells before you choose the Style command.

```
┌─Style────┐ ┌──OK──┐
│ ☐ Bold   │ └──────┘
│ ☐ Italic │ ┌─Cancel─┐
│          │ └────────┘
└──────────┘
```

In the dialog box, check Bold, Italic, or both. Then click the OK button to carry out the command.

For more information, see "Changing Style and Font" in Chapter 5.

Border
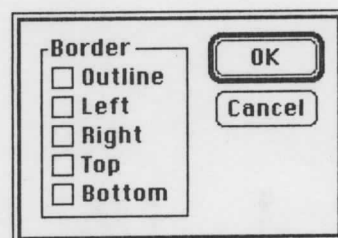
Border

```
┌─────────────────┐
│ Format          │
│  Number...      │
│  Alignment...   │
│  Style...       │
│  Border...      │
│  Cell Protection...│
│  ...............│
│  Column Width...│
└─────────────────┘
```

The Border command puts solid border lines around the cells in the selection.

You can add emphasis to the normal gridlines by adding solid border lines to the cells in a selected range. For example, you can underline cells by adding bottom borders. Borders are displayed on the screen and when the sheet is printed. For information about controlling normal gridlines, see the Display command.

Choose Borders after making a selection, then check the options you want.

```
┌─Border────┐ ┌──OK──┐
│ ☐ Outline │ └──────┘
│ ☐ Left    │ ┌─Cancel─┐
│ ☐ Right   │ └────────┘
│ ☐ Top     │
│ ☐ Bottom  │
└───────────┘
```

Outline Check this option to put a border around the outermost edges of the selection.

Left Check this option to put a border on the left edge of every cell in the range.

Right Check this option to put a border on the right edge of every cell in the range.

Top Check this option to put a border on the top edge of every cell in the range.
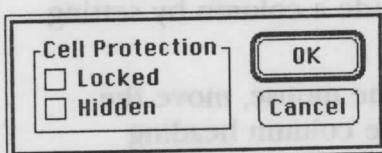
Bottom Check this option to put a border on the bottom edge of every cell in the range.

You can turn on any combination of options.

For more information, see "Adding a Border" in Chapter 5.

Cell Protection

The Cell Protection command controls whether the formulas in the selection are displayed and whether they can be edited in a protected worksheet.

Locked After you protect a worksheet, you cannot edit locked cells. You can unlock the cells in the selection by unchecking this option. Initially, all cells are locked.

Hidden The Hidden option hides formulas in the selection when the worksheet is protected. In a protected worksheet, a hidden formula does not appear in the formula bar. Initially, no cells in a worksheet are hidden.

For more information, see the Protect Document command, and "Protecting a Document" in Chapter 8.

Column Width

The Column Width command sets the width of the selected columns.

You need not select the entire column. If any cell in a column is selected, the new column width applies to all cells in that column. To adjust all of the columns in a worksheet, select an entire row by clicking in the row heading. Column Width affects all columns in the selection, including any that are hidden.
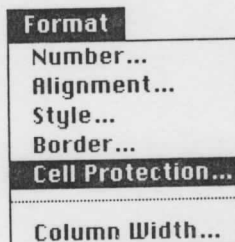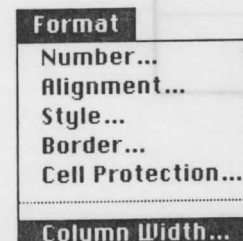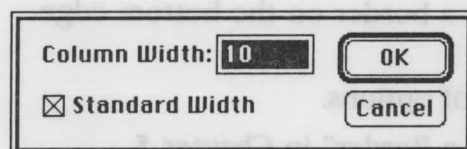
After you select the columns whose width you want to change, choose Column Width.

```
┌──────────────────────────────────────────┐
│  Column Width:│10  │      ┌─────────┐     │
│                             │   OK    │    │
│  ⊠ Standard Width           └─────────┘    │
│                             ┌─────────┐    │
│                             │ Cancel  │    │
│                             └─────────┘    │
└──────────────────────────────────────────┘
```

Column Width You can accept the proposed response, or type in a different width.

Standard Width Standard column width is ten spaces. Check this option to give the selection standard column width.

You can define column widths in decimal fractions. A column can be as wide as the screen. You can also hide a column by setting its width to zero.

To change the width of a column with the mouse, move the pointer to one of the lines that divide the column heading numbers, and drag.

The Data Menu
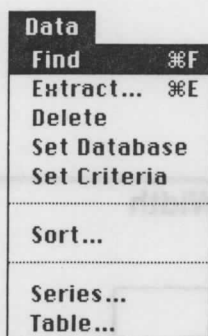
Find

The Find command selects records in the database range that match the criteria in the criteria range.

When you choose Find, Excel selects the first matching record in the database.

After you choose Find, the scroll boxes change from white to striped; when you scroll, Excel selects only matching records.

Find

```
┌──────────────────────┐
│ Data                 │
│ Find            ⌘F   │
│ Extract...      ⌘E   │
│ Delete               │
│ Set Database         │
│ Set Criteria         │
│ ──────────────────   │
│ Sort...              │
│ ──────────────────   │
│ Series...            │
│ Table...             │
└──────────────────────┘
```

Excel finds the records you specify in the criteria range.

Click to find the next matching record.

Click to find the previous matching record.

	A	B	C	D	E	
15	1/5/84	overhead	$440	City of Franklin		
16	1/6/84	inventory	$16,000	SW Wholesale		
17	1/5/84	salary	$1,000	Mary Fuller		
18	1/5/84	salary	$1,270	Carol Stansen		
19	1/5/84	salary	$945	Jim Parsons		
20	1/5/84	salary	$700	Karen Bush		
21	1/5/84	salary	$1,000	James Gregory		
22	1/5/84	salary	$1,160	Lisa La Flamme		
23	1/5/84	salary	$2,000	Andy Lubert		
24	1/15/84	overhead	$5,000	AR Office		

If you click here, Excel scrolls one screen down and then finds the next matching record.

After you choose the Find command, the scroll boxes are striped and Excel scrolls only to records that meet your criteria.

When you choose Find, the command on the Data menu changes to Exit Find. You stop finding records by choosing Exit Find from the Data menu, editing the formula or value of a cell, selecting a cell outside the database range, or choosing another command.

You can choose any command when Find is in effect. As soon as you choose another command you exit Find, but the matching record you last found stays selected.

If you choose Find again, Excel selects the next matching record. You can edit several matching records by choosing Find after each edit to find the next matching record.

A fast way to use Find is to press Command-F. Command-F selects the next matching record. To select the previous matching record, hold down the Shift key and press Command-F. You can use either of these command key options whether Find is in effect or not.

For more information, see "Finding Records" in Chapter 6.

Extract

```
┌─────────────────────────┐
│ Data                    │
│ Find          ⌘F        │
│ Extract...    ⌘E        │
│ Delete                  │
│ Set Database            │
│ Set Criteria            │
│ ·····················   │
│ Sort...                 │
│ ·····················   │
│ Series...               │
│ Table...                │
└─────────────────────────┘
```

Extract

The Extract command finds database records that match the criteria you define in the criteria range, and copies them into the selection.

The selection must contain the same field names you used in the database. You don't have to use all the database field names in the selection, however. Excel extracts information only from the database fields you specify in the extract selection.

```
┌──────────────────────────────────────┐
│ Extract              ┌──────────┐     │
│                      │    OK    │     │
│ ☐ Unique Records Only└──────────┘     │
│                      ┌──────────┐     │
│                      │  Cancel  │     │
│                      └──────────┘     │
└──────────────────────────────────────┘
```

Unique Records Only   If a record meets the criteria of more than one criteria row that you defined with the Set Criteria command, Excel may produce duplicates of that record. If you want the extracted list of records to include only one copy of each matching record, check Unique Records Only.

Important   Excel fills the rows below the field names with the information you extract from the database. If there are any values or formulas in the cells you extract to, Excel replaces them with the new information.

For more information, see "Extracting Information" in Chapter 6.

Delete

```
┌─────────────────────────┐
│ Data                    │
│ Find          ⌘F        │
│ Extract...    ⌘E        │
│ Delete                  │
│ Set Database            │
│ Set Criteria            │
│ ·····················   │
│ Sort...                 │
│ ·····················   │
│ Series...               │
│ Table...                │
└─────────────────────────┘
```

Delete

The Delete command deletes records from the database that meet the criteria you define in the criteria range.

When a record is deleted from the database, Excel shifts the rest of the database up to fill the gap, but the rest of the worksheet is not affected.

Important   You cannot undo the Delete command from the Data menu. Before you click the OK button, make sure you want to delete the records that match the criteria you set in your criteria range. You may want to choose the Find command before you choose Delete, to see which records Excel will delete.

For more information, see "Deleting Matching Records" in Chapter 6.

Set Database

The Set Database command defines the range of cells that contains or will contain the database.

A database in Excel consists of a row with field names, and the rows below it containing the records.

To define a database, select the range of cells you want to be your database, then choose Set Database. When you define a database with Set Database, Excel names the selection Database, just as if you had used the Define Name command. You can use this name as you can any named reference.

For more information about databases, see Chapter 6, "Using a Worksheet as a Database."

Set Criteria

The Set Criteria command is used to define the range of cells that contains or will contain the criteria that Excel uses to find, extract, or delete matching records from a database.

You enter the criteria in a cell range that contains one row with criteria names, and one or more rows below it with the criteria.

To define your criteria, select the range of cells that will contain the criteria, then choose Set Criteria. When you define criteria with Set Criteria, Excel names the selection Criteria. You can use this name as you can any named reference.

If a criteria name is the same as a field name in the database, the column under that name is compared. If you use a criteria name that is not used in the database, the column below that name is computed instead of compared; use a name that indicates what you are computing.

The criteria rows contain the criteria you want Excel to use. You can enter numbers, including comparison operators (for example, $<, >, =$, etc.), text formulas, or blank cells. If a cell contains a formula, Excel evaluates the formula and uses the result as the criterion it compares. For a blank cell, Excel accepts all comparisons as true.

You can have more than one criteria row under the criteria names. When Excel compares a criteria range against a database, it tests each record against each criteria row. If a record in the database meets all the criteria in any criteria row, Excel finds that record.
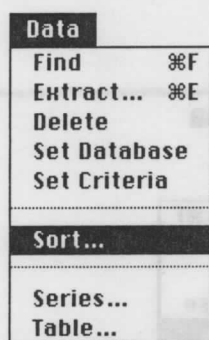
Set Database

Data	
Find	⌘F
Extract...	⌘E
Delete	
Set Database	
Set Criteria	
Sort...	
Series...	
Table...	

Set Criteria

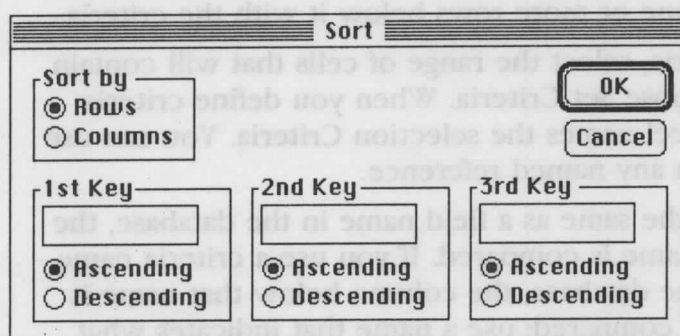| Data	
Find	⌘F
Extract...	⌘E
Delete	
Set Database	
Set Criteria	
Sort...	
Series...	
Table...	

You can include wildcards when you set criteria. A question mark (?) takes the place of a single character, and the asterisk (∗) takes the place of any number of characters. For more information on wildcards, see "Using Comparison Criteria" in Chapter 6.

For more information on criteria, see "Creating Criteria" in Chapter 6.

Sort

Sort

Data
Find	⌘F
Extract...	⌘E
Delete	
Set Database	
Set Criteria	
Sort...	
Series...	
Table...	

The Sort command sorts the rows or columns of the selection according to the contents of a key row or column within the selection.

You tell Excel which rows or columns to sort, which row or column is the key row or column, and whether to sort in ascending or descending order. You can select several key rows or columns.

Sort

Sort by
- ⦿ Rows
- ○ Columns

[OK]
[Cancel]

1st Key
- ⦿ Ascending
- ○ Descending

2nd Key
- ⦿ Ascending
- ○ Descending

3rd Key
- ⦿ Ascending
- ○ Descending

Sort By   Click Rows to sort by rows, or click Columns to sort by columns.

Keys   The Keys option tells Excel which column to sort by when sorting by rows, or which row to sort by when sorting by columns. Select a key row or column by clicking in a cell in the row or column you want.

If there are duplicates in the key row or column, Excel looks beyond the first key to see if you have defined more than one key row or column. Select second or third keys by clicking in the rows or columns in order of importance, with the most important key first.

In each Key box, click Ascending or Descending to tell Excel what order to sort in. In ascending order, Excel sorts in the following order, top to bottom or left to right:

- Numbers
- Text
- Logical values
- Error values
- Blanks

Numbers are sorted from the largest negative number to the largest positive number. Text is sorted in the following order:

```
space ! " # $ % & ' ( ) * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; <
= > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
[ \ ] ^ _ ` { | } ~ † ° ¢ £ § • ¶ ß ® © ™ ´ ¨ ≠ ∞ ± ≤ ≥ ¥ µ ∂ Σ
Π π ∫ ª º Ω ¿ ¡ ¬ √ ƒ ≈ Δ … - – ÷ ◊
```

For logical values, False is sorted before True. All error values are equal.

The numbers in the text sort order refer to numbers that are typed on the worksheet as text values. Numbers that appear on the worksheet as number values are sorted separately.

Excel ignores case and accent marks when sorting text. Upper-case letters, lower-case letters, and upper- or lower-case letters with accent marks are all equal.

In descending order, Excel reverses the order of everything except blank cells, which are always sorted last.

You can sort more than three key rows or columns by doing two sorts. When you do sorts of more than three key rows or columns, keep two rules in mind:

- The most recent sort takes precedence.
- Excel retains the previous sort sequence in places where the current sort produces equal items.

If you want Excel to take into account more than three key rows or columns, you would sort the data three keys at a time, starting with the least important group of keys and progressing to the most important group, but listing the most important key first within each group.

For example, if you have five key columns you want to use to sort the rows of a selection, do one sort with the fourth and fifth most important columns selected as the first and second keys. Then do a second sort with the three most important columns selected as the keys.

Note If you sort a database, be careful not to include the field names as part of the selection to be sorted.

For more information, see "Sorting Information" in Chapter 6.

Series

Series

The Series command fills a group of cells with a series of numbers.

This command fills by rows or columns. Select the rows or columns you want to fill with a series of numbers or dates. The first cell in each row or column to be filled must have the starting value in it.

After you have made the selection, choose Series.

Data	
Find	⌘F
Extract...	⌘E
Delete	
Set Database	
Set Criteria	
Sort...	
Series...	
Table...	

```
┌─Series in─┐ ┌─Type───┐ ┌─Date Unit─┐  ┌──────────┐
│ ○ Rows    │ │○ Linear│ │● Day      │  │    OK    │
│ ● Columns │ │○ Growth│ │○ Weekday  │  └──────────┘
│           │ │● Date  │ │○ Month    │  ┌──────────┐
│           │ │        │ │○ Year     │  │  Cancel  │
└───────────┘ └────────┘ └───────────┘  └──────────┘

Step Value: [        ]      Stop Value: [        ]
```

Series In Click this option to tell Excel in which direction to fill. If you click Rows, Excel fills each row of the selection with a series that begins with the value in the leftmost cell of the row. If you click Columns, Excel fills each column of the selection with a series that begins with the value in the top cell of the column.

Type Click Linear, Growth, or Date to define how the value for each cell is calculated from the starting values. If you click Linear, Excel adds the Step Value to each cell in turn to calculate the value of the succeeding cell. Click Growth to multiply the value of each cell in turn by the Step Value. Click Date to calculate a series of dates.

Date Unit   This field is active only if you click Date in the Type box. Click the unit you want the series of dates to increase by.

Step Value   Type the amount by which you want the series to be increased.

Stop Value   Type the value at which you want the series to end. Excel stops filling a series when it reaches the stop value, or the end of the selection, whichever comes first.

For more information, see "Creating a Series of Dates or Numbers" in Chapter 5.

Table

The Table command creates a Table, based on the input values and formulas you define on a worksheet. You cannot put a table on a macro sheet.

Set up your table on the worksheet using the procedures outlined in "Designing a Table" in Chapter 4, then choose the Table command.

Row Input Cell   If your input values are in a row, put the input cell reference in this box. You can either type the cell reference or select the cell.

Column Input Cell   If your input values are in a column, put the input cell reference in this box. You can either type the cell reference or select the cell.

For a one-input table, enter the reference of either the row input cell or the column input cell; for a two-input table, enter both.

If the Table dialog box covers an input cell that you want to select, you can move the dialog box by dragging it like a window. You can also scroll the worksheet while the Table dialog box is displayed.

For more information, see "Designing a Table" in Chapter 4.

Set Print Area

```
Options
Set Print Area
Set Print Titles
Set Page Break
Remove Page Break
..........................
Font...
Display...
..........................
Protect Document...
..........................
Precision As Displayed
R1C1
Calculate Now      ⌘=
Calculation...
```

The Options Menu

Set Print Area

The Set Print Area command defines the area of the worksheet that Excel prints when you choose the Print command.

In a new worksheet, the print area is the entire worksheet, and remains so until you change it.

To use this command, select the range of cells you want to print, then choose Set Print Area. Excel names the selected cell range Print_Area. Use the Print command from the File menu to print the area.

For more information, see "Printing a Document" in Chapter 8.

Set Print Titles

```
Options
Set Print Area
Set Print Titles
Set Page Break
Remove Page Break
..........................
Font...
Display...
..........................
Protect Document...
..........................
Precision As Displayed
R1C1
Calculate Now      ⌘=
Calculation...
```
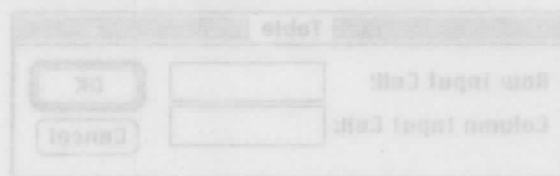
Set Print Titles

The Set Print Titles command defines text that Excel will print as titles.

Excel prints the titles whenever it prints any cells in the same row or column as the print titles area. The titles are printed on every page containing such cells.

The rows and columns that you define as titles can be anywhere in the worksheet. A print title applies to all cells in the same row or column, in the same way that row or column heading numbers do; a cell need only share the row or column with a print title for Excel to print the title.

To define print titles, type the text Excel will use as titles. You type this text into the cells in the row or column that you want the title to apply to when you print the worksheet. After you type the titles, select the entire rows or columns containing the text you want to define as titles, then choose Set Print Titles. Excel names the selected cell range Print_Titles.

You can define a print titles area that includes more than one row or column; the rows or columns must be adjoining. Use the Command key to select all of the rows and columns you want defined as the print titles area.

For more information, see "Printing a Document" in Chapter 8.

Set Page Break

The Set Page Break command sets manual page breaks for a printed worksheet.

A page break tells Excel where to stop printing one page and start printing another. Excel provides automatic page breaks based on margins and cell size, so any manual page breaks you set with this command are additional to the automatic page breaks.

When you choose Set Page Break, Excel puts page breaks above and to the left of the active cell. If the active cell is in column A, Excel adds a manual page break only above the cell. If the active cell is in row 1, Excel adds a manual page break only at the left edge of the cell.

The page breaks you set appear darker than the automatic page breaks. If you set your own page breaks, Excel adjusts automatic page breaks for the rest of the worksheet. Manual page breaks remain on a worksheet until you remove them with the Remove Page Break command.

For more information, see "Printing a Document" in Chapter 8.

Remove Page Break

The Remove Page Break command removes manual page breaks that you set with the Set Page Break command.

The command is dimmed unless the active cell is below or to the right of a manual page break.

For more information, see "Printing a Document" in Chapter 8.

Set Page Break

Options
Set Print Area
Set Print Titles
Set Page Break
Remove Page Break
Font...
Display...
Protect Document...
Precision As Displayed
R1C1
Calculate Now ⌘=
Calculation...

Remove Page Break

Options
Set Print Area
Set Print Titles
Set Page Break
Remove Page Break
Font...
Display...
Protect Document...
Precision As Displayed
R1C1
Calculate Now ⌘=
Calculation...

Font

Options
Set Print Area
Set Print Titles
Set Page Break
Remove Page Break
Font...
Display...
Protect Document...
Precision As Displayed
R1C1
Calculate Now   ⌘=
Calculation...

Font

The Font command changes the font and font size of the text in the active worksheet.

Font				
Athens	⇧	9	⇧	OK
Chicago		10		Cancel
Geneva		12		Size:
London	⇩	18	⇩	12

Font   The fonts in the System on your startup disk are listed in the list box. Scroll to see the available fonts, and select one.

Size   Select or type a font size. You can type a font size from 4 to 24 points. If you type a size different from the ones available for a particular font, Excel produces the size as closely as possible, but the results may look ragged.

The font and font size you select apply only to the active worksheet.

If you want to use fonts different from the ones on your disk, you can use the font mover to add or delete fonts. See *Macintosh*, your owner's guide, for details.

For more information, see "Changing Style and Font" in Chapter 5.

Display

Options
Set Print Area
Set Print Titles
Set Page Break
Remove Page Break
Font...
Display...
Protect Document...
Precision As Displayed
R1C1
Calculate Now   ⌘=
Calculation...

Display

The Display command controls screen display of formulas, gridlines, and row and column headings.

Display	
☐ Formulas	OK
☒ Gridlines	Cancel
☒ Row & Column Headings	

Formulas   Excel normally shows values in cells. Check Formulas to display formulas in the cells instead of the values they produce. Excel doubles the width of all columns when you choose this option.

Gridlines Excel normally displays gridlines. Removing gridlines adds emphasis to any borders you have added with the Borders command. Uncheck this option to remove gridlines.

Row & Column Headings Excel normally displays row and column numbers. Uncheck this option to hide them.

The settings in the Display dialog box affect only the active window.

For more information, see "Displaying Formulas in Cells" and "Adding a Border" in Chapter 5.

Protect Document/Unprotect Document

The Protect Document command prevents alteration of locked cells on the worksheet. The Unprotect Document command reverses Protect Document. The Protect Document command is available when an unprotected worksheet is active, and vice versa.

Excel displays one of the following dialog boxes, depending on whether your worksheet is protected or not.

**Protect Document/
Unprotect Document**

```
┌─ Options ──────────────┐
│  Set Print Area        │
│  Set Print Titles      │
│  Set Page Break        │
│  Remove Page Break     │
│........................│
│  Font...               │
│  Display...            │
│........................│
│  Protect Document...   │
│........................│
│  Precision As Displayed│
│  R1C1                  │
│  Calculate Now    ⌘=   │
│  Calculation...        │
└────────────────────────┘
```

```
┌─────────────────────────────────┐
│ Protect Document    ┌─────────┐  │
│                     │   OK    │  │
│ Password:           └─────────┘  │
│                     ┌─────────┐  │
│ ┌─────────────────┐ │ Cancel  │  │
│ │                 │ └─────────┘  │
│ └─────────────────┘              │
└─────────────────────────────────┘
```

```
┌─────────────────────────────────┐
│ Unprotect Document  ┌─────────┐  │
│                     │   OK    │  │
│ Password:           └─────────┘  │
│                     ┌─────────┐  │
│ ┌─────────────────┐ │ Cancel  │  │
│ │                 │ └─────────┘  │
│ └─────────────────┘              │
└─────────────────────────────────┘
```

Password Type a password, using any combination of letters, numbers, and symbols. The password you type when you reverse protection of a worksheet must be identical to the password you typed when you protected the worksheet.

Important If you lose your password, you cannot reverse protection of the worksheet. It's a good idea to keep a list of your passwords in a safe place.

If you are protecting your worksheet from yourself to avoid inadvertent changes of important information, you may want to protect your document without a password. If you click the OK button in the Protect Document dialog box without typing a password, Excel bypasses the dialog box when you unprotect the document. If you protect a document with no password, you also can unlock the cells of a selection without having to first unprotect the document.

Protect Document affects the entire worksheet. If you turn off gridlines with the Display command, Excel underlines unlocked cells when you protect the worksheet.

Cells can be locked, unlocked, hidden, and unhidden with the Cell Protection command. Except for worksheets protected with a blank password, the Cell Protection command is dimmed on a protected worksheet.

For more information, see "Protecting a Document" in Chapter 8.

Precision As Displayed/Full Precision

The Precision commands control how Excel stores numbers in cells.

When you create a new worksheet, Excel stores numbers to full precision — 14 digits — and performs all calculations with the stored numbers, no matter how they are displayed. When Excel is using full precision, the Options menu shows the Precision As Displayed command.

When you choose Precision As Displayed, Excel uses the displayed values for calculations. When this command is in effect, the Options menu shows the Full Precision command.

Precision As Displayed does not affect numbers in General format. Numbers in General format are always calculated to full precision. Precision As Displayed affects numbers that have been given any other format. This command affects only the active worksheet.

Excel calculates faster when using full precision, because with Precision As Displayed, Excel rounds off the numbers as it calculates.

Important   Any constant values on your worksheet that are formatted to display a fixed number of decimal places will change when you choose Precision As Displayed, because Excel stores the rounded number. Use Precision As Displayed only when the results of formulas do not seem to match the values used to calculate the formulas, because Excel stores the values more accurately.

For more information, see "Entering a Number" in Chapter 4.

Precision As Displayed/Full Precision

```
┌─ Options ──────────────┐
│  Set Print Area        │
│  Set Print Titles      │
│  Set Page Break        │
│  Remove Page Break     │
│ ·····················  │
│  Font...               │
│  Display...            │
│ ·····················  │
│  Protect Document...   │
│ ═══════════════════    │
│  Precision As Displayed│
│  R1C1                  │
│  Calculate Now     ⌘=  │
│  Calculation...        │
└────────────────────────┘
```

R1C1/A1

This command changes the style of cell reference.

Excel initially uses A1 reference style, but if you choose the R1C1 command, all references change to R1C1 style. With R1C1 style, rows are numbered from 1 to 16384, and columns are numbered from 1 to 256. The upper-left cell of a worksheet — row 1, column 1 — has a cell reference of R1C1.

When you choose this reference style, the R1C1 command changes to the A1 command. Choose the A1 command to return to the A1 reference style.

With A1 reference style, rows are numbered down the left side of the worksheet from 1 to 16384; the columns, however, use letters. The columns are labeled from left to right, starting with A through Z. The labeling continues with AA through AZ, then BA through BZ, and so on.

When this reference style is in effect, the R1C1 command is available on the Options menu.

For more information, see "References" in Chapter 4.

R1C1/A1

```
Options
  Set Print Area
  Set Print Titles
  Set Page Break
  Remove Page Break
  ..................
  Font...
  Display...
  ..................
  Protect Document...
  ..................
  Precision As Displayed
  R1C1
  Calculate Now        ⌘=
  Calculation...
```

Calculate Now

The Calculate Now command is used to recalculate worksheets and charts, or to calculate a formula you are creating in the formula bar.

This command is used when the Calculation command is set to Manual Calculation. You don't need to use this command when calculation is automatic, because Excel automatically recalculates dependent formulas in all open worksheets and charts every time you make a change.

If the formula bar is not active, choosing Calculate Now causes Excel to recalculate all open worksheets and charts.

When the formula bar is active, and the formula you are editing begins with an equal sign, Calculate Now calculates the formula and replaces it with the result of that formula. For example, if you want to enter a number that is the result of a formula, you can enter that formula and choose Calculate Now.

You can also calculate parts of a formula by selecting the part you want to calculate and choosing Calculate Now. For example, to change part of a formula from a variable to a constant, select that part of the formula in the formula bar and choose Calculate Now.

Calculate Now

```
Options
  Set Print Area
  Set Print Titles
  Set Page Break
  Remove Page Break
  ..................
  Font...
  Display...
  ..................
  Protect Document...
  ..................
  Precision As Displayed
  R1C1
  Calculate Now        ⌘=
  Calculation...
```

Calculation

```
┌─────────────────────────┐
│ Options                 │
├─────────────────────────┤
│  Set Print Area         │
│  Set Print Titles       │
│  Set Page Break         │
│  Remove Page Break      │
│ ......................  │
│  Font...                │
│  Display...             │
│ ......................  │
│  Protect Document...    │
│ ......................  │
│  Precision As Displayed │
│  R1C1                   │
│  Calculate Now      ⌘=  │
│  Calculation...         │
└─────────────────────────┘
```

Calculation

The Calculation command controls when Excel recalculates formulas in open documents.

Normally, every time you change a value or formula in a cell, or a name defined on a worksheet, Excel automatically recalculates formulas that depend on the value, formula, or name you changed. The time it takes Excel to recalculate the formulas depends on the number and size of the open documents and the complexity of the formulas. Even though Excel only recalculates dependent formulas, you may want to turn off automatic recalculation for quicker response when making many entries in a complex worksheet.

```
┌────────────────────────────────────────────┐
│ ┌─Calculation─────────────┐   ┌──────────┐  │
│ │ ⦿ Automatic             │   │    OK    │  │
│ │ ○ Automatic Except Tables│  └──────────┘  │
│ │ ○ Manual                │   ┌──────────┐  │
│ └─────────────────────────┘   │  Cancel  │  │
│                               └──────────┘  │
│ ┌──────────────────────────────────────┐   │
│ │ ⊠ Iteration                          │   │
│ │ Maximum Iterations: │100       │     │   │
│ │ Maximum Change:     │0.001     │     │   │
│ └──────────────────────────────────────┘   │
└────────────────────────────────────────────┘
```

Calculation The option you choose determines when Excel recalculates worksheets. The calculation options affect all open worksheets.

Automatic is the proposed response. When calculation is automatic, Excel recalculates all dependent formulas in open worksheets every time you change a value, formula, or name. This is the option that all new worksheets start with and use until you change it.

If you click Automatic Except Tables, Excel automatically recalculates all dependent formulas except the tables in all open worksheets. This option is available because recalculating tables slows the recalculation of the rest of the worksheet. When you change a table, you can recalculate it with the Table command.

Click Manual to turn off automatic recalculation. When calculation is manual, Excel recalculates the worksheet only when you choose the Calculate Now command.

Iteration Check this option if you want to turn on iteration. You can limit iteration by setting either or both of the options in this field.

Type a number in the Maximum Iterations box to set a limit on the number of times Excel iterates. Typing a number in the Maximum Change box also limits the number of iterations; if all cells change by less than the number you type in this field, iteration stops. If you type a number in both boxes, Excel ends iteration as soon as either maximum is reached.
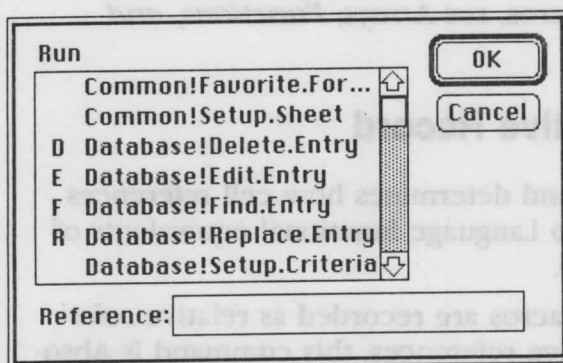
Unless you specify otherwise, Excel stops iterating when all values on the model change by less than 0.001, or when it completes 100 iterations. This ensures that the results are precise to at least one-tenth of a penny or percent.

For more information about iteration, see "Using Iteration" in Chapter 4.

Macro Menu

Run

The Run command runs a macro that you have defined.

```
┌─────────────────────────────────────┐
│ Run                      ┌───────┐   │
│                          │   OK  │   │
│   Common!Favorite.For...⬆ └───────┘   │
│   Common!Setup.Sheet     ┌───────┐   │
│ D Database!Delete.Entry  │Cancel │   │
│ E Database!Edit.Entry    └───────┘   │
│ F Database!Find.Entry                │
│ R Database!Replace.Entry             │
│   Database!Setup.Criteria⬇           │
│                                      │
│ Reference: [                    ]    │
└─────────────────────────────────────┘
```

You can select a macro from the list box or type the name or cell reference of a macro in the Reference box.

The macro name is preceded by the name of the macro sheet containing the macro, and an exclamation point. Use the same format if you type a name, rather than selecting one from the list box.

For more information on macros, see *Arrays, Functions, and Macros.*

Run
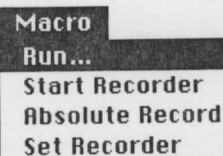
```
┌─────────────────┐
│ Macro           │
│ Run...          │
├─────────────────┤
│ Start Recorder  │
│ Absolute Record │
│ Set Recorder    │
└─────────────────┘
```

Start Recorder/Stop Recorder

Start Recorder/Stop Recorder

The Start Recorder command records subsequent actions and commands that have an Excel Macro Language functional equivalent. The actions and commands are recorded as Excel Macro Language functions that contain the actions and commands.

Initially, Excel records cell references as relative references. For more information on how references are recorded, see the Absolute Record/Relative Record command.

If Excel has to write over a non-blank cell, it stops recording and displays an alert box. Click the OK button to overwrite the cell, or click the Cancel button to end the command.

When Excel is recording, Stop Recorder appears on the Macro menu. Choose Stop Recorder to stop recording.

For more information on macros, see *Arrays, Functions, and Macros.*

Absolute Record/Relative Record

Absolute Record/Relative Record

The Absolute Record command determines how cell references are recorded for Excel Macro Language functional equivalents of Excel commands and actions.

Initially, cell references in macros are recorded as relative references. When recording relative references, this command is Absolute Record, allowing you to change to absolute reference recording. If you choose the Absolute Record command, Excel records references as absolute references, and the command changes to Relative Record.

For more information on macros, see *Arrays, Functions, and Macros.*

Set Recorder

Set Recorder

The Set Recorder command defines the selection as the recording area.

Recording starts in the upper-left corner of the range and proceeds downward in the column. At the bottom of each column within the selected rectangle Excel inserts a GOTO function that redirects control to the cell at the top of the next column in the range.

You can define the range by selecting a single cell. If you select a single cell, recording starts in that cell and continues down in the column the cell occupies. At the bottom of the column, recording is redirected to the top of the next column and continues down from there.

For more information on macros, see *Arrays, Functions, and Macros.*

Window Menu

Show Clipboard

The Show Clipboard command opens the Clipboard window. If the Clipboard contains cells, the window shows the size of the Clipboard contents in rows and columns. If the Clipboard contains text cut from the formula bar, the window displays the text.

```
┌──────────────────── Clipboard ────────────────────┐
│100  200  300                                       │
│400  500  600                                       │
│                                                    │
│                                                    │
│                                                    │
└────────────────────────────────────────────────────┘
```
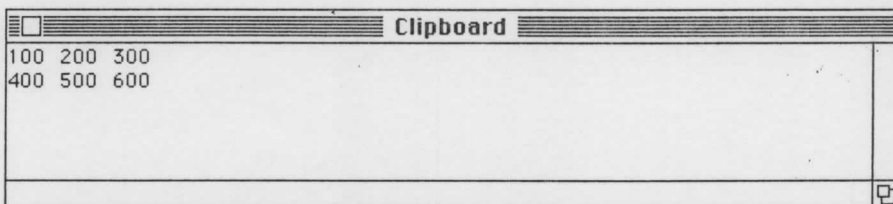
To close the Clipboard window, click its close box or choose the Close command from the File menu.

New Window

The New Window command opens an additional window onto the active document.

The new window has all the same properties as any other window. Excel puts a colon and a number after the name of the document. Each additional window that you open onto a document will also have a number. The number of additional windows you can add is limited only by the memory Excel has available.

For more information, see "Managing Windows" in Chapter 8.

Show Clipboard

```
┌─────────────────┐
│ Window          │
│ Show Clipboard  │
│ New Window      │
│ ─────────────── │
│ Budget          │
│ Expenses:1      │
│ Expenses:2      │
│ Mychart         │
└─────────────────┘
```

New Window

```
┌─────────────────┐
│ Window          │
│ Show Clipboard  │
│ New Window      │
│ ─────────────── │
│ Budget          │
│ Expenses:1      │
│ Expenses:2      │
│ Mychart         │
└─────────────────┘
```
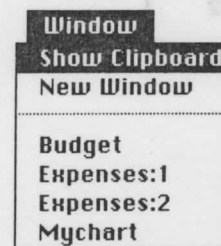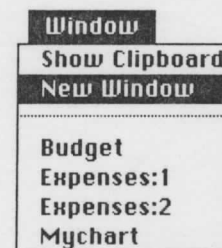
Activate Window

Window
Show Clipboard
New Window

Budget
Expenses:1
Expenses:2
Mychart

Activate Window

The Activate Window command is actually a group of commands that change according to the windows you have open. Each command that appears in this part of the Window menu activates the window containing the document with the same name as the command.

There will always be one command for each open window. Use this command to quickly make a window active. The command names shown here are examples; your menu will show whatever windows you have open.
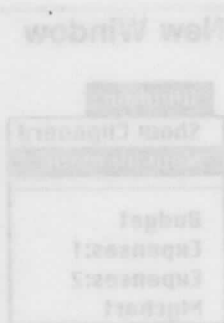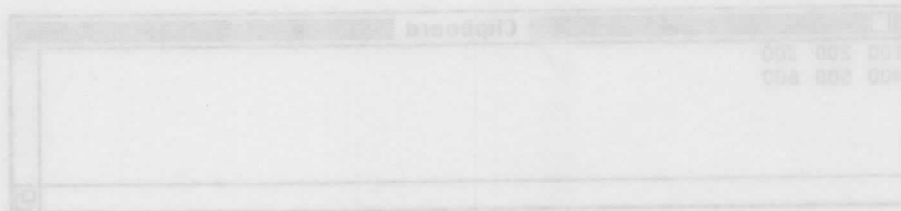
10 Chart Commands

This chapter describes Excel's chart commands. These commands are available when you are working on a chart.

Many of the chart commands work the same way as worksheet commands. Instead of repeating identical command descriptions, this chapter notes the commands that are the same and refers you to Chapter 9, "Worksheet Commands."

The commands are arranged in the order in which they appear on the menus. For an alphabetical list of commands, look in the Index under "Command."

É

About Excel...

Scrapbook
Alarm Clock
Note Pad
Calculator
Key Caps
Control Panel
Puzzle

File

New...	⌘N
Open...	⌘O
Open Links...	
Close All	
Save	⌘S
Save As...	
Delete...	
Page Setup...	
Print...	⌘P
Printer Setup...	
Quit	⌘Q

Edit

Undo	⌘Z
Cut	⌘X
Copy	⌘C
Copy Chart...	
Paste	⌘V
Clear...	⌘B
Paste Special...	

Gallery

Area...
Bar...
✓Column...
Line...
Pie...
Scatter...
Combination...

Preferred

Chart

Main Chart Type...
Overlay Chart Type...
Set Preferred Format
Axes...
Add Legend
Attach Text...
Add Arrow

Select Chart
Select Plot Area

Calculate Now

Format

Patterns...

Main Chart...
Overlay Chart...
Main Chart Axis...
Legend...
Text...

Macro

Run...
Set Automatic...
Start Recorder
Absolute Record
Set Recorder

Window

Show Clipboard

Budget
Expenses:1
Expenses:2
Mychart

Chart Menus

Excel has eight chart menus: Apple, File, Edit, Gallery, Chart, Format, Macro, and Window.

- The Apple menu is the same as for worksheet commands.
- All of the File menu commands except Print and Page Setup work the same way as the worksheet File commands.
- The Edit menu includes some familiar Macintosh editing commands as well as some that are specific to Excel. With the Edit menu commands, you can edit data and text in charts.
- The Gallery menu commands provide different chart types to choose from.
- The Chart menu commands control the chart type, and what chart objects appear in the chart.
- The Format menu commands control the format of the chart type and chart objects.
- The Macro menu commands allow you to run and record macros. For more information on macros, see the separate manual, *Arrays, Functions, and Macros*.
- The Window menu makes it easy to open windows and the Clipboard, and to create new windows for open charts.

File

```
New...        ⌘N
Open...       ⌘O
Open Links...
Close All
Save          ⌘S
Save As...
Delete...

Page Setup...
Print...      ⌘P
Printer Setup...

Quit          ⌘Q
```

File Menu

Except for Print and Page Setup, all File menu commands are the same for charts and worksheets.

When a chart is active, the Page Setup dialog box does not include the Print Row & Column Headings and Print Gridlines options, because they apply only to worksheets. Also, the Page Setup dialog box for charts has Print Width and Print Height boxes instead of Right Margin and Bottom Margin boxes. In these fields, you specify the width and height, in inches, of the area in which you want to print the chart. Excel prints the chart to fill the specified width and height. If the area you define is larger or smaller than the chart window, Excel scales the chart up or down, maintaining the same proportions as on the screen. In this way, you can change the size of the chart when you print it, without distorting its shape.

The dialog box has two additional printing options, Screen Size and Fit to Page. If the Fit to Page option is set, Excel prints the chart to fit the specified print width and height, regardless of the size of the chart on the screen. If the Screen Size option is set, Excel prints the chart in the same size as shown on the screen; it will only print as much of the chart as fits within the specified print width and height.

To print charts you must have a Macintosh printer, and have the Macintosh option set in the Printer Setup dialog box. Although you can set the TTY option for a Macintosh printer, TTY only prints text. If the TTY option is set in the Printer Setup dialog box, the Print and Page Setup commands are dimmed when a chart is active.

For more information, see "Printing a Document" in Chapter 8.

Edit Menu

Undo

Undo

Edit

```
Undo          ⌘Z
Cut           ⌘H
Copy          ⌘C
Copy Chart...
Paste         ⌘U
Clear...      ⌘B
Paste Special...
```

Undo

The Undo command reverses editing commands carried out in the formula bar; it also reverses the Copy Chart command. Undo does not affect editing commands carried out in a chart.

For more information on undoing editing in the formula bar, see the Undo command in Chapter 9, and "Undoing Editing Commands" in Chapter 5.

Cut

The Cut command removes a selection from the formula bar and puts it in the Clipboard. You cannot cut objects from the chart using the Cut command.

For more information on editing the contents of the formula bar, see "Adding or Changing Information" in Chapter 5.

Cut

```
Edit
Undo        ⌘Z
Cut         ⌘H
Copy        ⌘C
Copy Chart...
Paste       ⌘U
Clear...    ⌘B
Paste Special...
```
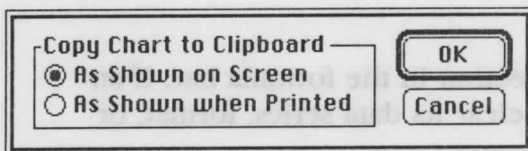
Copy

The Copy command copies the data series and format of a chart that has been selected with the Select Chart command. When the formula bar is active, the Copy command copies the selection from the formula bar into the Clipboard.

To copy a chart, you first select the chart with the Select Chart command, then choose Copy. Then, you activate the chart you want to copy to, and use either the Paste or the Paste Special command to paste the copied chart.

For more information on copying data series and chart formats, see "Copying Data Series" and "Copying a Chart Format" in Chapter 7. For more information on editing the contents of the formula bar, see "Adding or Changing Information" in Chapter 5.

Copy

```
Edit
Undo        ⌘Z
Cut         ⌘H
Copy        ⌘C
Copy Chart...
Paste       ⌘U
Clear...    ⌘B
Paste Special...
```

Copy Chart

The Copy Chart command puts a copy of the selected chart in the Clipboard, replacing anything that may already be in the Clipboard. You can restore the previous contents of the Clipboard by choosing the Undo command.

Copy a chart into the Clipboard when you want to include it in other Macintosh documents.

Copy Chart presents a dialog box asking what size chart you want to put in the Clipboard.

Copy Chart

```
Edit
Undo        ⌘Z
Cut         ⌘H
Copy        ⌘C
Copy Chart...
Paste       ⌘U
Clear...    ⌘B
Paste Special...
```

```
Copy Chart to Clipboard      OK
● As Shown on Screen
○ As Shown when Printed      Cancel
```

As Shown on Screen Click this option to set the size of the copy put in the Clipboard equal to the size on the screen.

As Shown when Printed   Click this option to set the size of the copy put in the Clipboard equal to the size of the printed chart. The chart's printed size is determined by your responses in the Page Setup dialog box.

Paste

```
Edit
Undo          ⌘Z
Cut           ⌘H
Copy          ⌘C
Copy Chart...
Paste         ⌘U
Clear...      ⌘B
Paste Special...
```

Paste

When a chart is active, the Paste command creates data series from copied worksheet cells and pastes them into the active chart, or pastes the data series and formats from a copied chart into the active chart. If you are working in the formula bar, the Paste command pastes a cut or copied selection at the insertion point, or replaces a selection in the formula bar with the cut or copied selection.

To paste information from a worksheet, select and copy the cells, create a new chart or activate an existing chart, and choose the Paste command. Excel automatically creates data series and pastes them into the active chart. For details on how Excel organizes information into data series, see "Working with Data Series" in Chapter 7. For information on controlling how Excel divides the copied selection into series and categories, see the Paste Special command.

To paste information from another chart, select and copy the chart with the Select Chart and Copy commands, create a new chart or activate an existing chart, then choose the Paste command.

When Excel pastes a copied chart, it adds the data series to any series already in the active chart and replaces the format of the active chart with the format of the copied chart. If you want to paste only the format or only the data series of a copied chart, use the Paste Special command.

Clear

```
Edit
Undo          ⌘Z
Cut           ⌘H
Copy          ⌘C
Copy Chart...
Paste         ⌘U
Clear...      ⌘B
Paste Special...
```

Clear

The Clear command clears a selection in the formula bar. If an entire chart is selected you can clear its data series, format, or both.

When the formula bar is active, Excel clears the selection from the formula bar. When you are working in the chart, Excel displays a dialog box so you can choose whether to clear the chart format, data series, or both.
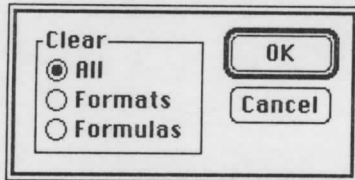
All Click this option to clear the data series and the format of the chart.

Formats Click this option to clear the format of the chart, without affecting the data series.

Formulas Click this option to clear the data series from the chart, without changing the chart's format.

For more information, see "Deleting a Data Series" and "Starting Over with a New Format" in Chapter 7.

Paste Special

The Paste Special command is similar to the Paste command. When a chart is active, Paste Special creates data series from copied worksheet cells and pastes them into the active chart, or pastes the data series and formats from a copied chart into the active chart.

The Paste Special command is different from the Paste command because it lets you control how Excel organizes a worksheet selection into data series.

To paste information from a worksheet, select and copy the cells, create a new chart or activate an existing chart, and choose the Paste Special command. Excel presents a dialog box so you can define how you want the worksheet selection organized. The last two options in the dialog box change according to what you click in the Values In box.

Paste Special
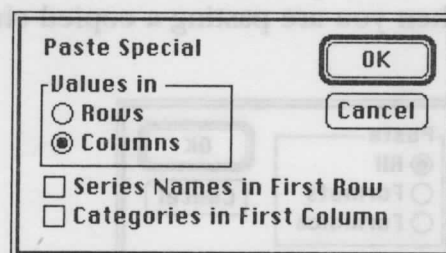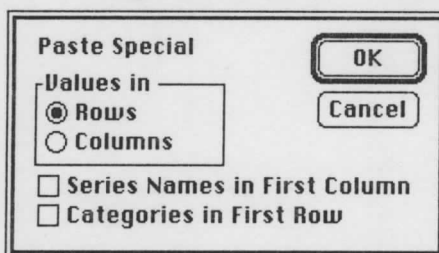
Values In   Click Rows to make the contents of each row in the selection a data series. Click Columns to make the contents of each column in the selection a data series.
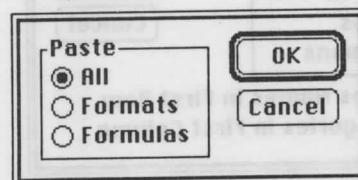
Series Names in First Column   When this option is checked, Excel uses the contents of the cell in the first column in each row in the selection as the name of the data series in that row. If this option is unchecked, Excel uses the contents of the first cell of each row as the first value of the data series.

Categories in First Row   When this option is checked, Excel uses the text in each cell in the first row of the selection as the category for the series in the same column. If this option is unchecked, Excel uses the contents of the first row as the first series of values.

Series Names in First Row   When this option is checked, Excel uses the contents of each cell in the first row of each column in the selection as the name of the series in that column. If this option is unchecked, Excel uses the contents of the first cell of each column as the first value of the data series.

Categories in First Column   When this option is checked, Excel uses the text in each cell in the first column of the selection as the category for the series in the same row. If this option is unchecked, Excel uses the contents of the first column as the first series of values.

To paste the data series, format, or both from another chart, select and copy the chart with the Select Chart and Copy commands, then create a new chart or activate an existing chart, and choose the Paste Special command. Excel displays a different dialog box when you are pasting a copied chart:

```
┌─Paste──────┐  ┌──────────┐
│ ◉ All      │  │    OK    │
│ ○ Formats  │  └──────────┘
│ ○ Formulas │  ┌──────────┐
│            │  │  Cancel  │
└────────────┘  └──────────┘
```

All   Click this option to paste the data series and the format of the copied chart. Excel adds all of the data series from the copied chart to any data series already on the active chart. The format of the active chart, however, is completely replaced with the format of the copied chart.

Formats   Click this option to replace the format of the active chart with the format of the chart you copied. The Formats option does not affect the information in the chart you are pasting into.

Formulas Click this option to add the data series from the copied chart to any data series already in the active chart. This option does not change the format of the chart you are pasting into.

For more information on Paste Special and how Excel organizes selections into data series, see "Working with Data Series" in Chapter 7.
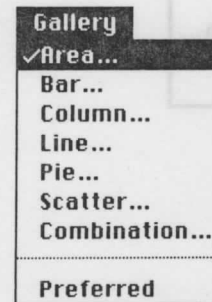
Gallery Menu

Area

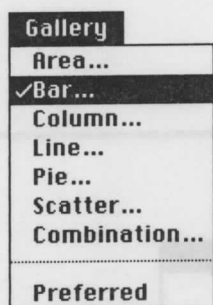The Area command changes the format of the active chart to the area chart format you choose from the gallery.
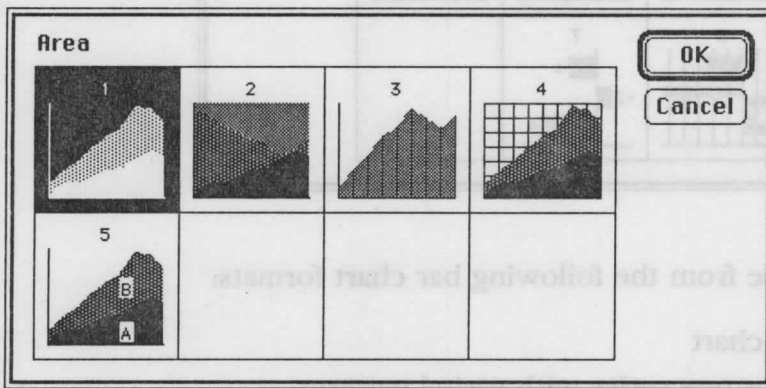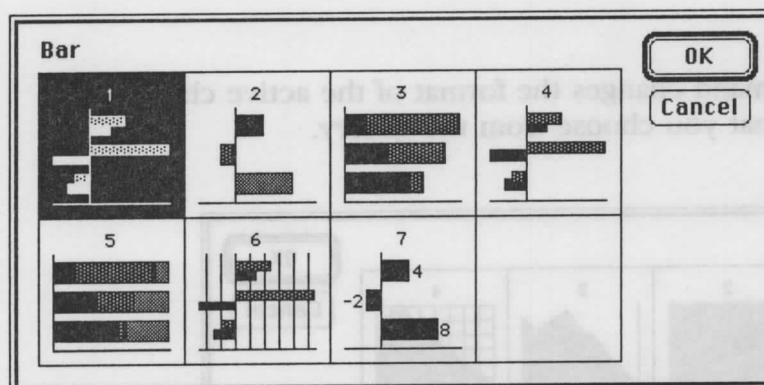

You can choose from the following area chart formats:

- Simple area chart
- 100% area chart
- Area chart with drop lines
- Area chart with gridlines
- Area chart with areas labeled

For more information, see "Using Chart Formats" in Chapter 7.

Bar

Gallery
```
  Area...
✓ Bar...
  Column...
  Line...
  Pie...
  Scatter...
  Combination...

  Preferred
```

Bar

The Bar command changes the format of the active chart to the bar chart format you choose from the gallery.
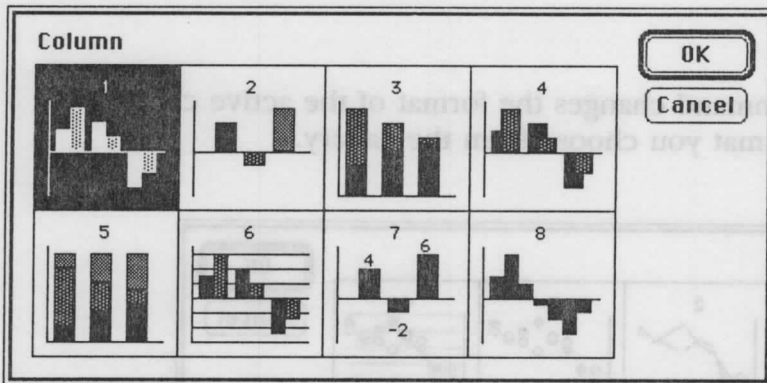

You can choose from the following bar chart formats:

- Simple bar chart
- Bar chart for one series with varied patterns
- Stacked bar chart
- Overlapped bar chart
- 100% stacked bar chart
- Simple bar chart with vertical gridlines
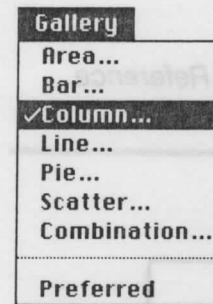- Simple bar chart with value labels

For more information, see "Using Chart Formats" in Chapter 7.

Column

The Column command changes the format of the active chart to the column chart format you choose from the gallery.
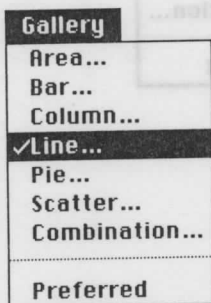

You can choose from the following column chart formats:

- Simple column chart
- Column chart for one series with varied patterns
- Stacked column chart
- Overlapped column chart
- 100% stacked column chart
- Simple column chart with horizontal gridlines
- Simple column chart with value labels
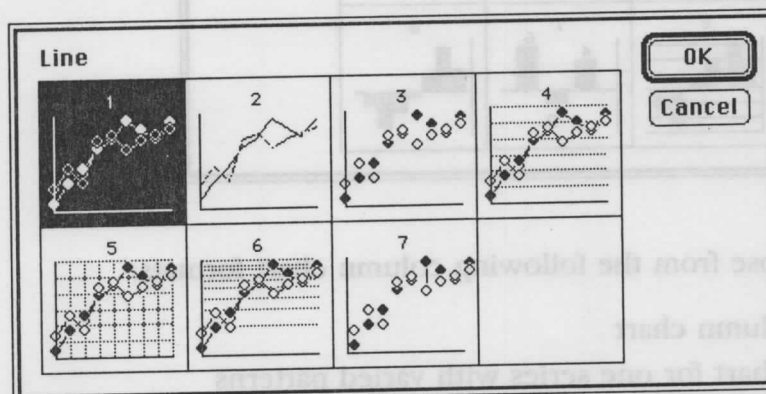- Step chart (no space between categories)

For more information, see "Using Chart Formats" in Chapter 7.

Column

Line

```
┌─────────────────────┐
│ Gallery             │
│   Area...           │
│   Bar...            │
│   Column...         │
│ ✓ Line...           │
│   Pie...            │
│   Scatter...        │
│   Combination...    │
│ ....................│
│   Preferred         │
└─────────────────────┘
```

Line

The Line command changes the format of the active chart to the line chart format you choose from the gallery.

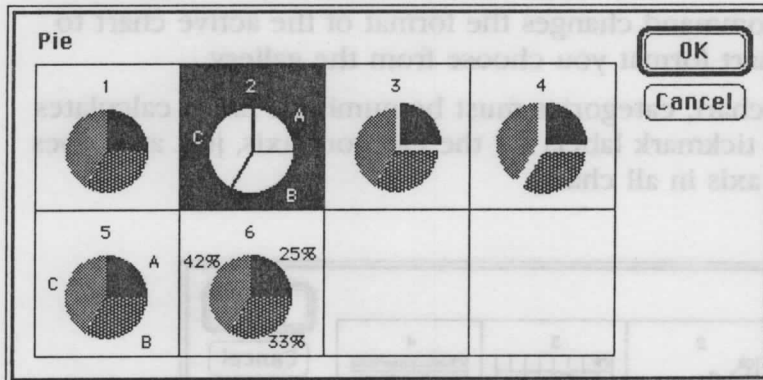You can choose the following line chart formats:

- Simple line chart with lines and markers
- Lines only
- Markers only
- Lines and markers with horizontal gridlines
- Lines and markers with horizontal and vertical gridlines
- Lines and markers with logarithmic scale and gridlines
- Hi-lo chart with markers and hi-lo lines

For more information, see "Using Chart Formats" in Chapter 7.

Pie

The Pie command changes the format of the active chart to the pie chart format you choose from the gallery.

If you have more than one series, a pie chart plots only the first one.


You can choose from the following pie chart formats:

- Simple pie chart
- Pie chart with all wedges patterned the same and labeled with categories
- Pie chart with first wedge exploded
- Pie chart with all wedges exploded
- Pie chart with category labels
- Pie chart with value labels expressed as percentages

For more information, see "Using Chart Formats" in Chapter 7.

Scatter

Gallery

Area...
Bar...
Column...
Line...
Pie...
✓Scatter...
Combination...

Preferred
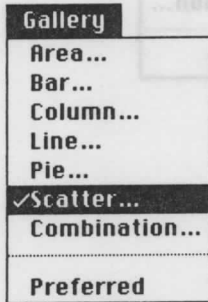
Scatter

The Scatter command changes the format of the active chart to the scatter chart format you choose from the gallery.

For a scatter chart, categories must be numbers. Excel calculates the scale and tickmark labels for the category axis, just as it does for the value axis in all charts.
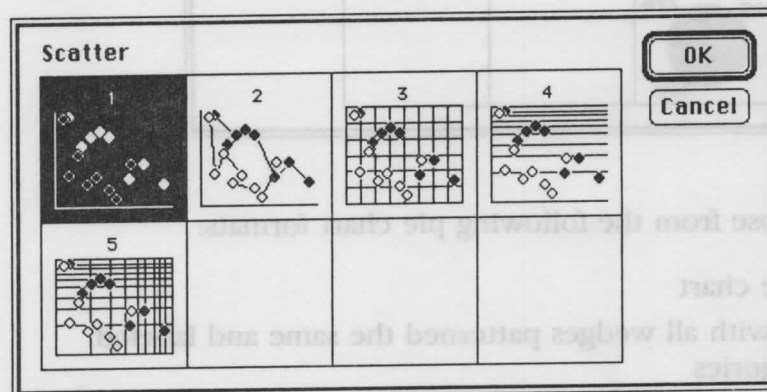
You can choose from the following scatter chart formats:

- Scatter chart with markers only
- Scatter chart with markers from the same series connected by lines
- Markers with horizontal and vertical gridlines
- Markers with semi-logarithmic gridlines
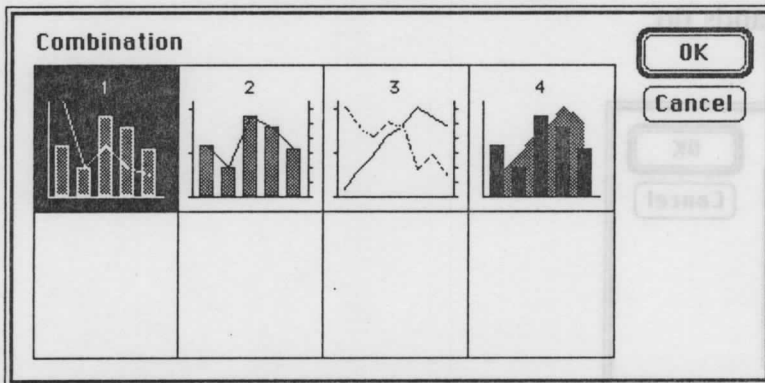- Markers with log-log gridlines

For more information, see "Using Chart Formats" in Chapter 7.

Combination

The Combination command changes the format of the active chart to the combination chart format you choose from the gallery.

Excel divides the data series equally between the main chart and the overlay chart. If there is an odd number of series, the main chart will have one more than the overlay chart.

For details on controlling how Excel distributes data series between the main chart and the overlay chart, see "Using Overlay Charts" in Chapter 7.

You can choose from the following combination chart formats:

- Column chart with overlaid line chart
- Column chart overlaid by line chart with opposing scale
- Two line charts overlaid with independent scales
- Area chart with overlaid column chart

Preferred

The Preferred command changes the format of the active chart to the format you define with the Set Preferred Format command.

Initially, the preferred chart format is format 1 from the column gallery.

For more information, see "Using the Preferred Chart Format" in Chapter 7.

Combination

Gallery
- Area...
- Bar...
- Column...
- Line...
- Pie...
- Scatter...
- ✓Combination...
- Preferred

Preferred

Gallery
- Area...
- Bar...
- ✓Column...
- Line...
- Pie...
- Scatter...
- Combination...
- Preferred
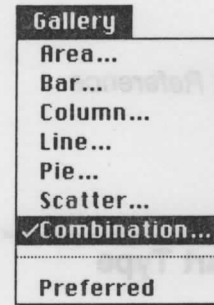
Chart Menu

Main Chart Type

Main Chart Type

The Main Chart Type command changes the basic type of the main chart. It does not change any other formats, as the Gallery menu commands do.

```
Chart
Main Chart Type...
Overlay Chart Type...
Set Preferred Format
Axes...
Add Legend
Attach Text...
Add Arrow
----------------------
Select Chart
Select Plot Area
----------------------
Calculate Now
```

```
Main Chart            [ OK ]
-Type-
  ○ Area            [ Cancel ]
  ○ Bar
  ● Column
  ○ Line
  ○ Pie
  ○ Scatter
```
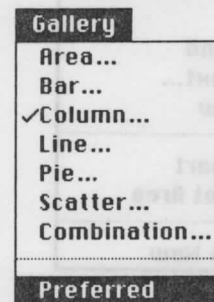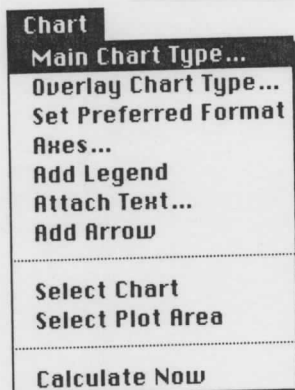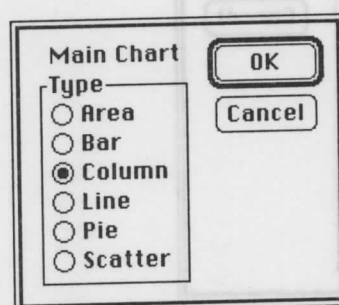
Type   Click an option to choose the basic chart type: area, bar, column, line, pie, or scatter.

For more information, see "Using Chart Formats" in Chapter 7.

Overlay Chart Type
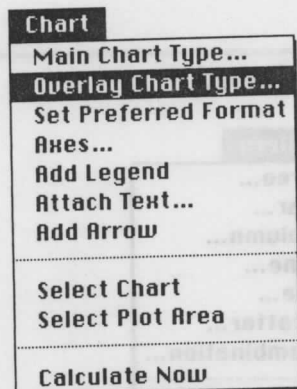
Overlay Chart Type

The Overlay Chart Type command creates an overlay chart or changes the chart type of the overlay chart. It does not change any other formats, as the Gallery menu commands do.

```
Chart
Main Chart Type...
Overlay Chart Type...
Set Preferred Format
Axes...
Add Legend
Attach Text...
Add Arrow
----------------------
Select Chart
Select Plot Area
----------------------
Calculate Now
```

```
Overlay Chart         [ OK ]
-Type-
  ● None            [ Cancel ]
  ○ Area
  ○ Bar
  ○ Column
  ○ Line
  ○ Pie
  ○ Scatter
```
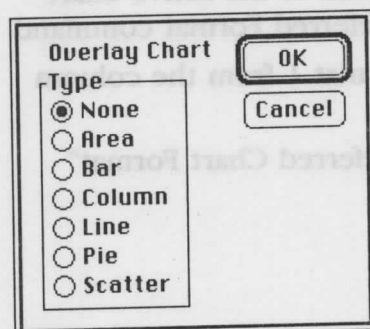
Type   To create an overlay chart or change the overlay chart type, click one of the options. To remove an existing overlay chart and merge its data series back into the main chart, click None.

When you have an overlay chart, Excel divides data series evenly between the main chart and the overlay chart. If there is an odd number of data series, the main chart has one more than the overlay chart.

For more information on controlling how Excel distributes data series between a main chart and an overlay chart, see "Using Overlay Charts" in Chapter 7.

Set Preferred Format

The Set Preferred Format command changes the format that Excel automatically uses for all new charts.

Initially, when you create a new chart, Excel uses format 1 from the column gallery. If you want Excel to use a different format for new charts, change the format in your active chart to the format you want, then choose Set Preferred Format from the Chart menu.

When you choose Set Preferred Format, the format of the active chart becomes the format Excel uses for new charts, as well as the format Excel uses when you choose the Preferred command from the Gallery menu.

For more information, see "Using the Preferred Chart Format" in Chapter 7.

Axes

The Axes command controls whether the axes and major and minor gridlines are visible. When there is an overlay chart, the dialog box has check boxes for both the main and overlay chart axes.

Category Axes	Value Axes	
Show	Show	OK
☒ Main Chart Axis	☒ Main Chart Axis	Cancel
☒ Overlay Chart Axis	☒ Overlay Chart Axis	
☐ Major Grid Lines	☒ Major Grid Lines	
☐ Minor Grid Lines	☐ Minor Grid Lines	

You can change the appearance of axes and gridlines with the Patterns command from the Format menu. You can change other properties of the axes, such as the ranges and where axes cross each other, with the Axis command from the Format menu.

For more information, see "Changing Axes" in Chapter 7.

Set Preferred Format

Chart
Main Chart Type...
Overlay Chart Type...
Set Preferred Format
Axes...
Add Legend
Attach Text...
Add Arrow
Select Chart
Select Plot Area
Calculate Now

Axes

Chart
Main Chart Type...
Overlay Chart Type...
Set Preferred Format
Axes...
Add Legend
Attach Text...
Add Arrow
Select Chart
Select Plot Area
Calculate Now

Add Legend/Delete Legend

```
┌─────────────────────────┐
│ Chart                   │
├─────────────────────────┤
│ Main Chart Type...      │
│ Overlay Chart Type...   │
│ Set Preferred Format    │
│ Axes...                 │
│ Add Legend              │
│ Attach Text...          │
│ Add Arrow               │
├─────────────────────────┤
│ Select Chart            │
│ Select Plot Area        │
├─────────────────────────┤
│ Calculate Now           │
└─────────────────────────┘
```

Attach Text

```
┌─────────────────────────┐
│ Chart                   │
├─────────────────────────┤
│ Main Chart Type...      │
│ Overlay Chart Type...   │
│ Set Preferred Format    │
│ Axes...                 │
│ Add Legend              │
│ Attach Text...          │
│ Add Arrow               │
├─────────────────────────┤
│ Select Chart            │
│ Select Plot Area        │
├─────────────────────────┤
│ Calculate Now           │
└─────────────────────────┘
```

Add Legend/Delete Legend

The Add Legend command adds a legend to a chart. Excel makes the plot area smaller to accommodate the legend. You can format the legend with the Legend and Text commands from the Format menu.

After you choose Add Legend, the command changes to Delete Legend. Delete Legend removes the legend. If you later choose Add Legend again, the legend will have the same format it had before you deleted it.

For more information, see "Adding a Legend" in Chapter 7.

Attach Text

The Attach Text command attaches text to certain parts of a chart, such as axes, plot area, and data points. The text identifies the part to which it is attached. If you want, you can edit the text in the formula bar after you attach it.

```
┌──────────────────────────────────────────────┐
│  Attach Text              ┌──────────┐         │
│ ┌─Attached to──────────┐  │    OK    │         │
│ │ ○ Chart Title         │  └──────────┘        │
│ │ ○ Category Axis       │  ┌──────────┐         │
│ │ ○ Value Axis          │  │  Cancel  │         │
│ │ ● Series or Data Point│  └──────────┘        │
│ │   Series Number: ☐    │                      │
│ │   Point Number:  ☐    │                      │
│ └───────────────────────┘                      │
└──────────────────────────────────────────────┘
```

Click the option that describes what you want to attach text to, then click the OK button. Excel attaches the text, selects it, and displays it in the formula bar.

You can then edit the contents of the formula bar. When the text is as you want it, press the Enter key to enter the text in the chart. To format the text, use the Text command from the Format menu.

Chart Title   Excel centers the word "Title" above the plot area.

Category Axis   Excel centers the letter "X" (for x-axis) along the category axis.

Value Axis   Excel centers the letter "Y" (for y-axis) along the value axis.

Series or Data Point   Click this option to attach text to a series or a data point in a series.

If the chart contains only one series, Excel uses the name of the series as the text.

To attach text to an entire series, click Series or Data Point and type the plot order number in the Series Number box. Excel uses the name of the series as the text, and puts it next to the last marker in the series.

To attach text to an individual data point in a series, click Series or Data Point, type the plot order number of the series containing the data point into the Series Number box, and type the data point number into the Point Number box. Excel uses the category name for that data point, and puts it next to the marker for the data point.

For more information, see "Adding Text to a Chart" in Chapter 7.

Add Arrow/Delete Arrow

The Add Arrow command adds an arrow to the upper-left corner of the chart. You can move the arrow or change its size by dragging it with the mouse, or format the arrow with the Patterns command from the Format menu.

When you select an arrow, the command changes to Delete Arrow. The Delete Arrow command removes the selected arrow from the chart.

For more information, see "Adding an Arrow" in Chapter 7.

Add Arrow/Delete Arrow

Chart
Main Chart Type...
Overlay Chart Type...
Set Preferred Format
Axes...
Add Legend
Attach Text...
Add Arrow
Select Chart
Select Plot Area
Calculate Now

Select Chart

```
┌─────────────────────────────┐
│ Chart                       │
├─────────────────────────────┤
│ Main Chart Type...          │
│ Overlay Chart Type...       │
│ Set Preferred Format        │
│ Axes...                     │
│ Add Legend                  │
│ Attach Text...              │
│ Add Arrow                   │
├─────────────────────────────┤
│ Select Chart                │
│ Select Plot Area            │
├─────────────────────────────┤
│ Calculate Now               │
└─────────────────────────────┘
```

Select Plot Area

```
┌─────────────────────────────┐
│ Chart                       │
├─────────────────────────────┤
│ Main Chart Type...          │
│ Overlay Chart Type...       │
│ Set Preferred Format        │
│ Axes...                     │
│ Add Legend                  │
│ Attach Text...              │
│ Add Arrow                   │
├─────────────────────────────┤
│ Select Chart                │
│ Select Plot Area            │
├─────────────────────────────┤
│ Calculate Now               │
└─────────────────────────────┘
```

Calculate Now

```
┌─────────────────────────────┐
│ Chart                       │
├─────────────────────────────┤
│ Main Chart Type...          │
│ Overlay Chart Type...       │
│ Set Preferred Format        │
│ Axes...                     │
│ Add Legend                  │
│ Attach Text...              │
│ Add Arrow                   │
├─────────────────────────────┤
│ Select Chart            ⌘A  │
│ Select Plot Area            │
├─────────────────────────────┤
│ Calculate Now           ⌘=  │
└─────────────────────────────┘
```

Select Chart

The Select Chart command selects the entire chart.

When the chart is selected, you can use the Patterns command from the Format menu to change the background pattern, or the border style, weight, or pattern. You can also clear the chart's format or data series with the Clear command, or copy them to another chart with the Copy command.

Select Plot Area

The Select Plot Area command selects the plot area of the chart. The plot area of a chart is the area bounded by the axes. When the plot area is selected, you can change its background or border pattern with the Patterns command from the Format menu.

Calculate Now

The Calculate Now command recalculates worksheets and redraws charts.

You use this command when Manual Calculation or Automatic Except Tables is in effect. For more information on manual and automatic calculation, see "Changing to Manual Calculation" in Chapter 4, and the Calculation command in Chapter 9.

Format Menu

Patterns

The Patterns command affects the selected object in the chart.

Before you choose Patterns, select an object by clicking on it, or by using either the Select Chart or Select Plot Area command. When you choose Patterns, Excel displays a dialog box with the options that apply to what you have selected.

The different options are listed below. When Excel displays the Patterns dialog box, look in the following list for the options you see in the dialog box.

○ Invisible

Invisible   If you click this option, the selected part does not appear on the chart. Some parts of a chart cannot have an invisible pattern; use the Axes command from the Chart menu to add or remove axes, tickmark labels, and gridlines. Use the Main Chart and Overlay Chart commands from the Format menu to add or remove drop lines and hi-lo lines.

○ Automatic

Automatic   This option applies only to data points and series. If you click this option for a group of patterns, Excel assigns the patterns to data points or series in the same order as the patterns appear in the dialog box. When you change an automatic pattern, it is no longer automatic for that particular data point or series. If you later click Automatic, Excel reassigns the appropriate pattern.

□ Apply to All

Apply to All   This option appears in the dialog box only when a data point or series is selected. This option applies the choices you make in the dialog box to all data points if there is one plotted series, or to all series if there is more than one series plotted.
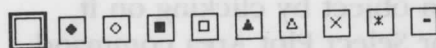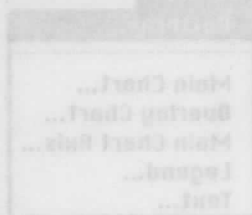
Patterns   This option applies to background, border, area, line, axis, and arrow patterns.
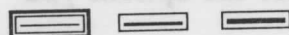
Marker Patterns This option applies to markers in line charts.

Weight This option affects the weight of a line, border, arrow shaft, or axis.

```
┌─Border Style───────────────┐
│ ◉ Normal   ○ Shadow        │
└────────────────────────────┘
```
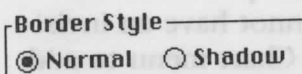
Border Style All charts initially have a Normal border. Click Shadow to add a shadow to the bottom and right sides of the selected chart, text, or legend.

```
Type of Tick Marks
┌─Major────────┐  ┌─Minor────────┐
│ ◉ Invisible  │  │ ◉ Invisible  │
│ ○ Inside     │  │ ○ Inside     │
│ ○ Outside    │  │ ○ Outside    │
│ ○ Cross      │  │ ○ Cross      │
└──────────────┘  └──────────────┘
```
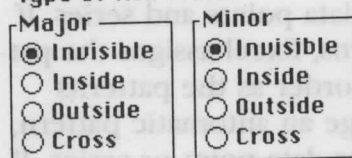
Type of Tickmarks This option controls the appearance of tickmarks on your axes. Click Invisible to make tickmarks invisible. Click Inside to make tickmarks appear only on the side of the axes next to the chart. Click Outside to put tickmarks on the side of the axes away from the chart. Click Cross to have the tickmarks cross the axes.

```
┌─Head Width─┐  ┌─Head Length─┐  ┌─Head Style─┐
│ → → → │  │ → → → │  │ − → → │
└────────────┘  └─────────────┘  └────────────┘
```
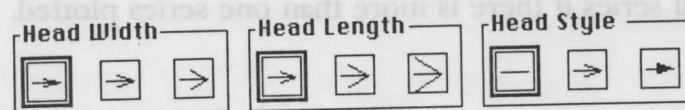
Arrowhead You can control the width, length, and style of an arrowhead. Select any combination to make the arrowhead appear the way you want.

For more information, see "Creative Formatting" in Chapter 7.

Main Chart

The Main Chart command controls formats in the chart other than patterns and the basic chart type. Use this command in conjunction with the Main Chart Type command from the Chart menu as an alternative to the Gallery.

The following table shows the different ways to format the data in the chart. Only those relevant to the current chart type appear in the dialog box.

Format	Area	Bar	Column	Line	Pie	Scatter
Stacked	X	X	X	X		
100%	X	X	X	X		
Vary by Categories		X	X	X	X	X
Drop Lines	X			X		
Hi-Lo Lines				X		
Overlapped		X	X			
% Overlap		X	X			
% Cluster Spacing		X	X			
Angle of First Slice					X	

Stacked   Within a category, the value from the first series is measured from the series axis. The value from the second series is measured from the top of the value from the first series, and so on. (See format 3 in the column gallery.)

100%   The values in each category are normalized to add up to 100 percent. The absolute values do not appear on the chart. The series themselves are not altered. (See format 5 in the column gallery.)

Vary by Categories   This applies only when the chart includes a single series. It means that the pattern for each data point is different. (See format 2 in the column gallery.)

Drop Lines   Drop lines extend from the highest value in each category to the category axis. (See format 3 in the area gallery.)

Hi-Lo Lines   Hi-lo lines extend from the highest to the lowest value in each category. (See format 7 in the line gallery.)

Overlapped   This applies to bar and column charts only. It means that the number you type after % Overlap determines how much the bars within a cluster overlap, rather than how far apart they are. (See format 4 in the column gallery.)

% Overlap The number you type here represents a percentage of the width of a bar or column. If Overlapped is checked, this option determines how far the bars in a cluster overlap. If Overlapped is not checked, this option determines how much space is between bars or columns within a cluster.

% Cluster Spacing The number you type here represents a percentage of the width of a bar or column. This option determines how much space there is between clusters of bars or columns.

Angle of First Slice In a pie chart, this represents the angle of the first edge of the first slice. The angle is measured in degrees from vertical, or straight up.

For more information, see "Using Chart Formats" in Chapter 7.

Overlay Chart

Overlay Chart

```
Format
Patterns...
..................
Main Chart...
Overlay Chart...
Main Chart Axis...
Legend...
Text...
```

The Overlay Chart command controls formats of the overlay chart, other than patterns and the basic chart type. Use this command in conjunction with the Overlay Chart Type command from the Chart menu as an alternative to the Gallery.

Except for the two options listed below, Overlay Chart works the same way as the Main Chart command, except that it affects the overlay chart. For a full description of the other Overlay Chart dialog box options, see the Main Chart command.

First Series in Overlay Chart This option controls which series Excel puts in the overlay chart. Type the plot order number, as displayed in the series formula, of the first series you want Excel to plot in the overlay chart. Excel plots that series, and any other series with higher plot order numbers, in the overlay chart.

For example, if you have six series, and you type 4, the series with plot order numbers 4, 5, and 6 appear on the overlay chart. The series with plot order numbers 1, 2, and 3 remain on the main chart.

Automatic Series Distribution Click this option to automatically divide the data series evenly between the main chart and the overlay chart. If there is an odd number of data series, the main chart has one more than the overlay chart.

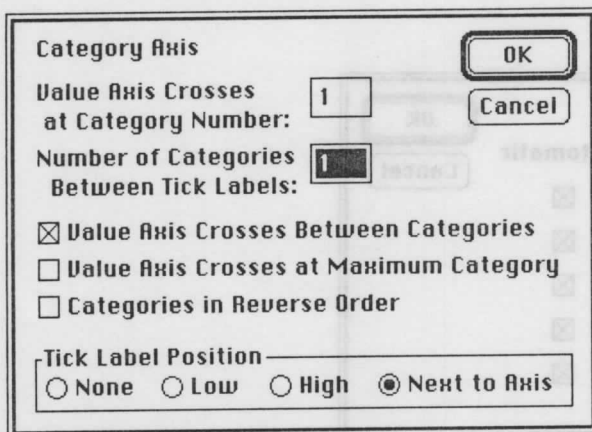For more information, see "Using Overlay Charts" in Chapter 7.

Axis

This command changes to Main Chart Axis when a main chart is selected, and Overlay Chart Axis when an overlay chart is selected.

The Axis commands control the order in which the categories or values are given, the point at which the other axis crosses the selected axis, and the position of tickmark labels.

For the category axis, these commands also control the interval between tickmark labels, the range of values displayed on the value axis, and whether the scale is logarithmic.

When you choose the Axis command, Excel displays a dialog box. If the category axis is selected, the Category Axis dialog box is displayed. If the value axis is selected, the Value Axis dialog box is displayed.

Category Axis

Value Axis Crosses at Category Number Type the number of the category at which you want the value axis to cross the category axis. Normally this number is 1.

Number of Categories Between Tick Labels Initially, every category has a tickmark label, so this number is 1. Type 2 to label only every other category, type 3 to label every third category, and so on.

Value Axis Crosses Between Categories If this option is not checked, the value axis crosses through the center of the category indicated in the Value Axis Crosses at Category Number box. Click this option to make the value axis cross between two categories.

Axis

| Format |
| Patterns... |
| Main Chart... |
| Overlay Chart... |
| Main Chart Axis... |
| Legend... |
| Text... |

Value Axis Crosses at Maximum Category Click this option to make the value axis cross the category axis at the last category.

Categories in Reverse Order Excel normally presents categories from left to right. Click this option to reverse the order.

Tick Label Position Normally, tickmark labels are next to the axis. Click Low to make them appear at the low end of the value axis, click High to make them appear at the high end, or click None if you don't want tickmark labels.

You can change the appearance of a tickmark label by selecting it and choosing the Text command from the Format menu.

Value Axis

```
┌──────────────────────────────────────────────┐
│  Value Axis                          ┌──────┐  │
│                                      │  OK  │  │
│  Range                  Automatic    └──────┘  │
│                                     ┌────────┐ │
│  Minimum:        [ 0   ]    ⊠       │ Cancel │ │
│                                     └────────┘ │
│  Maximum:        [ 8   ]    ⊠                  │
│                                                │
│  Major Unit:     [ 1   ]    ⊠                  │
│                                                │
│  Minor Unit:     [ 0.2 ]    ⊠                  │
│  Category Axis   [ 0   ]    ⊠                  │
│   Crosses At:                                  │
│                                                │
│  ☐ Logarithmic Scale                           │
│  ☐ Values in Reverse Order                     │
│                                                │
│  ┌Tick Label Position──────────────────────┐  │
│  │ ○ None   ○ Low   ○ High   ⊙ Next to Axis │  │
│  └──────────────────────────────────────────┘ │
└──────────────────────────────────────────────┘
```

The first five options are initially set on Automatic. For each of these options, you can either let Excel set the option automatically or set it yourself.

Minimum, Maximum When Automatic is checked, Excel includes the lowest and highest values in all included series in the chart. Numbers you type here override this: all values below the number you type in the Minimum box and above those you type in the Maximum box do not appear on the chart. The series themselves are not affected.

Major Unit, Minor Unit When Automatic is checked, Excel calculates the distance between major and minor tickmarks. If you enter numbers here, Excel uses them instead.

The automatic major unit is the greatest power of ten that is less than the maximum value. The automatic minor unit is one-half of the major unit, if there are two or more major units. If there are fewer than two major units, the automatic minor unit is one-tenth of the major unit.

Category Axis Crosses At   When Automatic is checked, the category axis crosses the value axis at zero or the lowest value, whichever is higher. Either check Automatic or type the value at which you want the category axis to cross.

Logarithmic Scale   When the scale is logarithmic, Excel recalculates the following values and units:

Minimum value	The automatic minimum value is the largest power of ten that is less than the lowest data point. If there is no such data point, the minimum value is 1.
Maximum value	The automatic maximum value is the smallest power of ten that is greater than the highest value. If the highest value is less than or equal to zero, the maximum value is 1.
Major unit	Must be a power of ten.
Minor unit	The automatic minor unit is the same as for nonlogarithmic scale. If you change the minor unit, it must be one-tenth or one-half of the major unit. There will be either eight or one major tickmarks between powers of ten corresponding to log 2, log 3, log 4...log 9; or log 5.

Values in Reverse Order   Excel normally presents values in descending order from top to bottom. Check this box to reverse the order.

Tick Label Position   Normally, tickmark labels are next to the axis. Click Low to make them appear at the low end of the category axis, click High to make them appear at the high end, or click None if you don't want tickmark labels.

You can change the appearance of a tickmark label by selecting it and choosing the Text command from the Format menu.

For more information, see "Changing Axes" in Chapter 7.
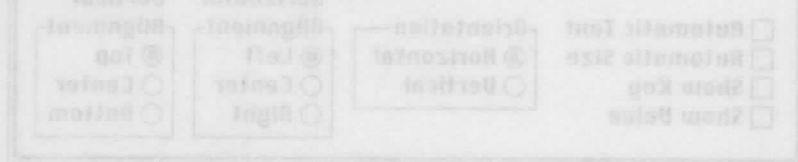
Legend

```
┌─ Format ──────┐
│ Patterns...   │
│ ............. │
│ Main Chart... │
│ Overlay Chart...│
│ Main Chart Axis...│
│ ▓Legend...▓   │
│ Text...       │
└───────────────┘
```

Text

```
┌─ Format ──────┐
│ Patterns...   │
│ ............. │
│ Main Chart... │
│ Overlay Chart...│
│ Main Chart Axis...│
│ Legend...     │
│ ▓Text...▓     │
└───────────────┘
```

Legend

The Legend command determines the position of the legend on the chart.

```
┌──────────────────────────────────┐
│  Legend        ┌────────┐         │
│ ┌Type──────┐   │   OK   │         │
│ │ ○ Bottom │   └────────┘         │
│ │ ○ Corner │   ┌────────┐         │
│ │ ○ Top    │   │ Cancel │         │
│ │ ● Vertical│  └────────┘         │
│ └──────────┘                      │
└──────────────────────────────────┘
```
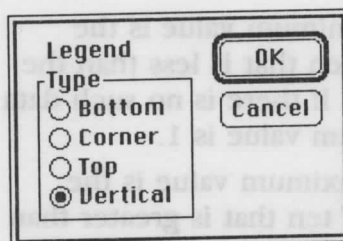
Type Click the position in which you want the legend displayed on your chart.

You can change the appearance of the text in your legends with the Text command from the Format menu.

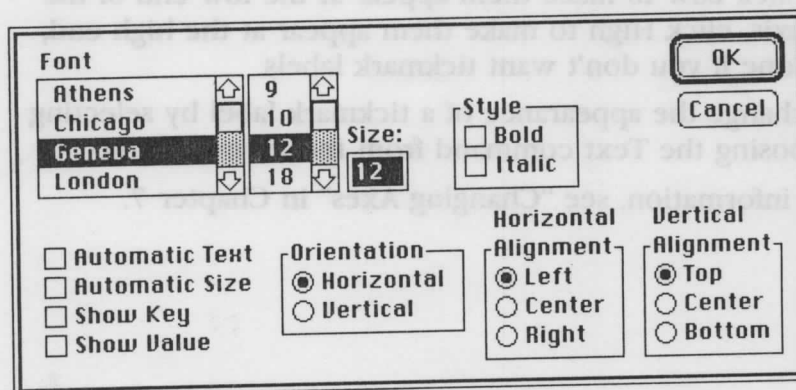For information about adding a legend to your chart, see the Add Legend command, and "Adding a Legend" in Chapter 7.

Text

The Text command controls the style of the selected text and its relationship to other objects on the chart.

When you select text on a chart and choose the Text command, Excel displays the dialog box shown below. If you select an axis or legend, the dialog box contains fewer options.

```
┌────────────────────────────────────────────────────────────┐
│  Font                                          ┌────────┐    │
│  Athens      ⇧  9  ⇧                           │   OK   │    │
│  Chicago        10                             └────────┘    │
│  Geneva         12   Size:  ┌Style──┐          ┌────────┐    │
│  London      ⇩  18  ⇩  │12│ │□ Bold │          │ Cancel │    │
│                             │□ Italic│         └────────┘    │
│                             └───────┘                        │
│                                      Horizontal  Vertical    │
│  □ Automatic Text  ┌Orientation┐   ┌Alignment┐ ┌Alignment┐  │
│  □ Automatic Size  │● Horizontal│  │● Left    ││● Top     │  │
│  □ Show Key        │○ Vertical  │  │○ Center  ││○ Center  │  │
│  □ Show Value      └───────────┘  │○ Right   ││○ Bottom  │  │
│                                   └─────────┘ └──────────┘  │
└────────────────────────────────────────────────────────────┘
```

Font   The list box shows the fonts available on your disk. Select the font you want.

If you want to use fonts different from those available on your disk, you can use the Font Mover to add or delete fonts. For more information, see *Macintosh*, your owner's guide.

Size   The Size box lists the sizes available for the selected font. Select one of the sizes listed, or type a size from 4 to 24 points. If you type a size different from the ones available for a particular font, the results may appear ragged.

Style   All fonts can appear normal, italic, bold, or bold italic. Check one of the options, both, or neither.

Automatic Text   If the selected text was created with the Attach Text command and later edited, you can check this option to restore the original text.

Automatic Size   If you have changed the size of the border around the selected text, you can check this option to restore the border to automatic size.

Show Key   If the selected text is attached to a data point or series, you can check this option to show the pattern used for the associated data point or series next to the text in the legend.

Show Value   If the selected text is attached to a data point, you can check this option to replace the text with the value of the data point.

Orientation   Horizontal is normal left-to-right orientation; Vertical means the letters are stacked top-to-bottom.

Horizontal Alignment   Click an option to choose how you want the text aligned: Left, Center, or Right.

Vertical Alignment   Click an option to choose how you want the text aligned: Top, Center, or Bottom.

Macro Menu

When a chart is active the Macro menu commands work exactly like the same commands on the worksheet Macro menu. For more information, see the Macro menu in Chapter 9, "Worksheet Commands," and the separate manual *Arrays, Functions, and Macros.*

```
Macro
Run...
Set Automatic...
Start Recorder
Absolute Record
Set Recorder
```

```
┌─────────────────────┐
│ Window              │
│ Show Clipboard      │
│---------------------│
│ Budget              │
│ Expenses:1          │
│ Expenses:2          │
│ Mychart             │
└─────────────────────┘
```

Window Menu

When a chart is active, the commands in the Window menu work exactly like the same commands on the worksheet Window menu.

The New Window command does not appear on this menu for charts because you can open only one window on a chart.

For more information, see the Window menu in Chapter 9, "Worksheet Commands," and "Managing Windows" in Chapter 8.